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ABSTRACT

The program, designed to give the driver-training pupil a semester of 50 hours of instruction, involves four instructional phases, one of them optional to give flexibility to fit the varying needs of different school systems: Phase 1--the classroom phase, with 30 instructional hours devoted to 30 specific events, staggered at each school (staggered scheduling, possible in the cooperative framework, reduces cost); Phase 2--the driving simulator phase; Phase 3--driving range work (where it is possible); Phase 4--behind-the-wheel driving in actual traffic. The manual, with its companion publication, the coordinator's guide, provides basic information for establishing and operating the program. It includes detailed descriptions of classroom events, daily lesson plans, and extensive listings of free instructional materials and student handouts. Sources of equipment and sample tests are appended. (AJ)

In driving simulation training, students are seated in automobile mock-ups (below) and view changing traffic situations on a movie screen. Pupils must react (left) to changing conditions. Typical mock classroom for driving simulator is shown also

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COOPERATIVE DRIVER EDUCATION AND SAFETY TRAINING

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Instructor's Guide

CE 001 667

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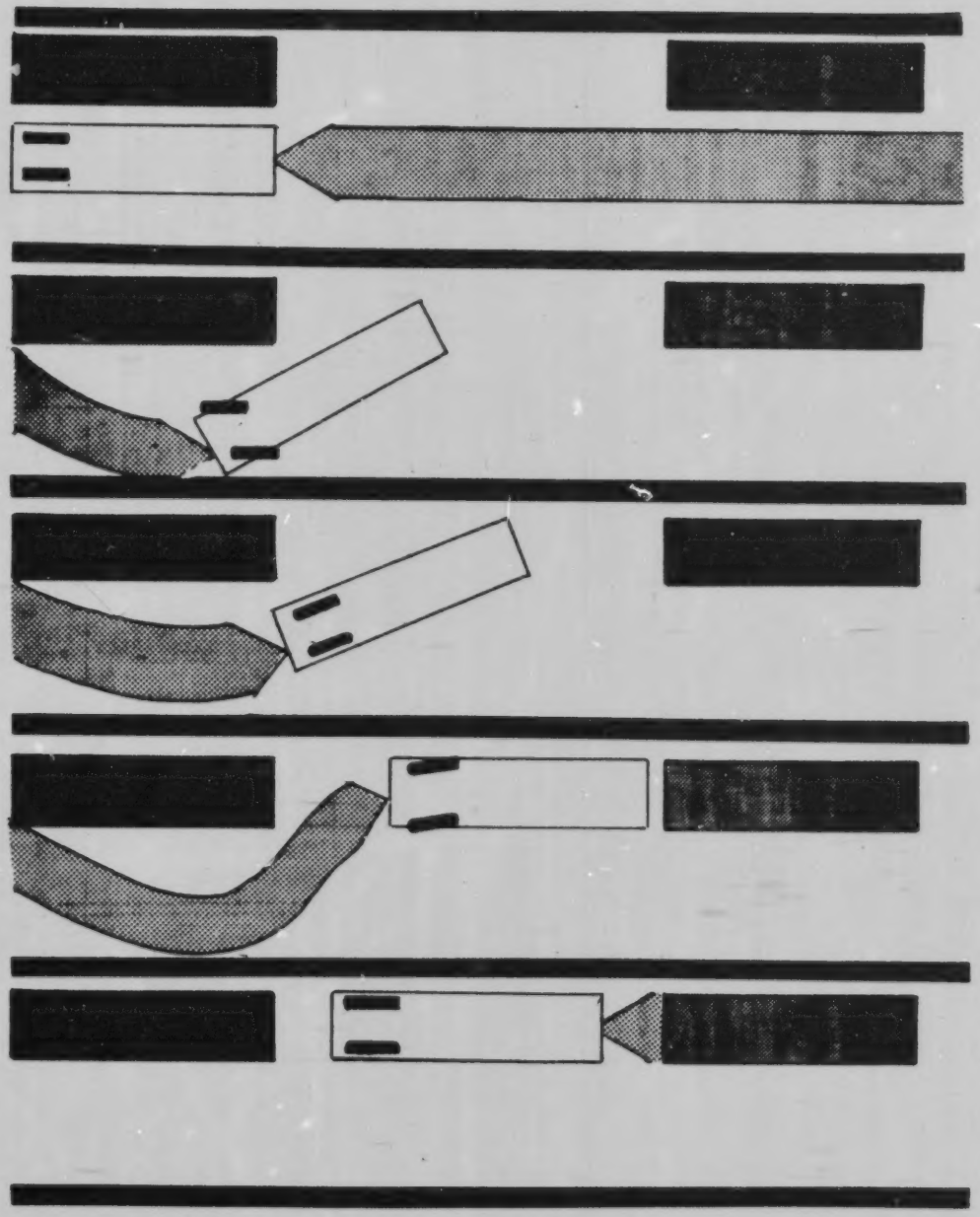

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Introduction

In response to the driver education dilemma faced by many schools, the Appalachia Educational Laboratory, Inc., has developed an alternative approach that for the first time makes driver education feasible for all high schools, without regard to size or location.

Fundamental to this alternative program is the Educational Cooperative--several individual schools or districts working together for mutual benefit. After several years of development, testing and evaluation at a number of sites, the Cooperative Driver Education and Safety Training Program has demonstrated at least four major advantages over traditional programs:

- It is operable at much lower cost,
- It gives more students access to driver education,
- Quality of instruction is as good or better than with costlier programs,
- It is flexible enough to be adapted to the requirements and resources of any school or system.

Additional advantages of the Cooperative Driver Education and Safety Training Program are described in the Administrator's Adoption Guide, one of three publications prepared for the adoption and operation of this program. The Administrator's Guide includes specific per-pupil cost comparisons, capital investment data, program quality evaluation, a general curriculum description and a brief discussion of organization.

This Instructor's Guide and its companion publication, the Coordinator's Guide, are the basic how-to manuals for establishing and operating the Cooperative Driver Education and Safety Training Program.

This manual includes detailed descriptions of classroom events, daily lesson plans, extensive listings of free instructional materials and student handouts and a helpful appendix of equipment sources.

The guide for the cooperative driver education coordinator is designed to assist, step-by-step, with the establishment and operation of the Cooperative Approach to Driver Education and Traffic Safety Training.

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Information about these publications is available upon request.

Program Synopsis

The Cooperative Driver Education and Safety Training Program, as extensively tested at Educational Cooperatives in Kentucky and Tennessee, involves four instructional phases. One of these phases is optional, however, giving the program the flexibility to fit the needs of large and small, rural and urban school systems. During a typical semester of instruction the pupil receives 50 hours of training in the class and behind the wheel.

Phase One

This is the classroom phase, with 30 instructional hours devoted to 30 specific events. So that films and other classroom teaching aids can be used most effectively, the classroom events at each school are staggered. (This staggered scheduling, possible within the Educational Cooperative framework, helps significantly to reduce the cost of driver education.)

The following chart is a sample semester schedule for classroom events in an educational cooperative involving seven schools. Numbers in the columns under each school correspond to specific instructional events in the classroom phase. (Events are described in the next chapter.) Staggered scheduling of the Drivocator unit and Evaluator and Brake Reaction Timer is also shown in the sample chart.

Phase Two

At this point the student begins work in the driving simulator. If driving range instruction is not available, the phase involves 9 hours work on the simulator. This is reduced to 5 hours if range instruction is provided. (IMPORTANT NOTE: THE NUMBER OF

SAMPLE SEMESTER SCHEDULE OF
CLASSROOM INSTRUCTIONAL EVENTS

DATE	SCHOOL A	SCHOOL B	SCHOOL C	SCHOOL D	SCHOOL E	SCHOOL F	SCHOOL G
1-24	1	1	1	1	5	1	1
1-25	2	2	2	2	7	2	2
1-26	1-2	8	5	8	8	23	7
1-27	7	9	E. 6	9	9	5	3
1-28	D. 3	5	3	7	10	24	4
1-31	D. 4	3	4	5	11	E. 6	8
2-1	D. 13-14	4	7	E. 6	12	11	24
2-2	E. 5-6	10	8	15	13	D. 11-12	9
2-3	E. 5-6	7	9	16	14	D. 13	10
2-4	8	17	10	19	15	D. 14	5
2-7	9	11	15	20	16	7	E. 6
2-8	10	D. 12-13	16	10	17	10	11
2-9	11	D. 14	17	3	18	15	12
2-10	12	E. 6	19	4	19	16	13
2-11	15	19	20	21	20	17	14
2-14	16	20	11	22	21	3	15
2-15	17	15	12	23	22	4	16
2-16	20	16	13	24	23	21	17
2-17	19	18	14	26	24	26	18
2-18	18	23	18	18	25	18	19

*D.--Drivocator Unit
**E.--Evaluator and Brake Reaction Timer

BEHIND-THE-WHEEL DRIVING HOURS REQUIRED IN DRIVER EDUCATION IS USUALLY DICTATED BY STATE REGULATIONS. INSTRUCTORS SHOULD BE FAMILIAR WITH THESE REGULATIONS.)

Phase Three

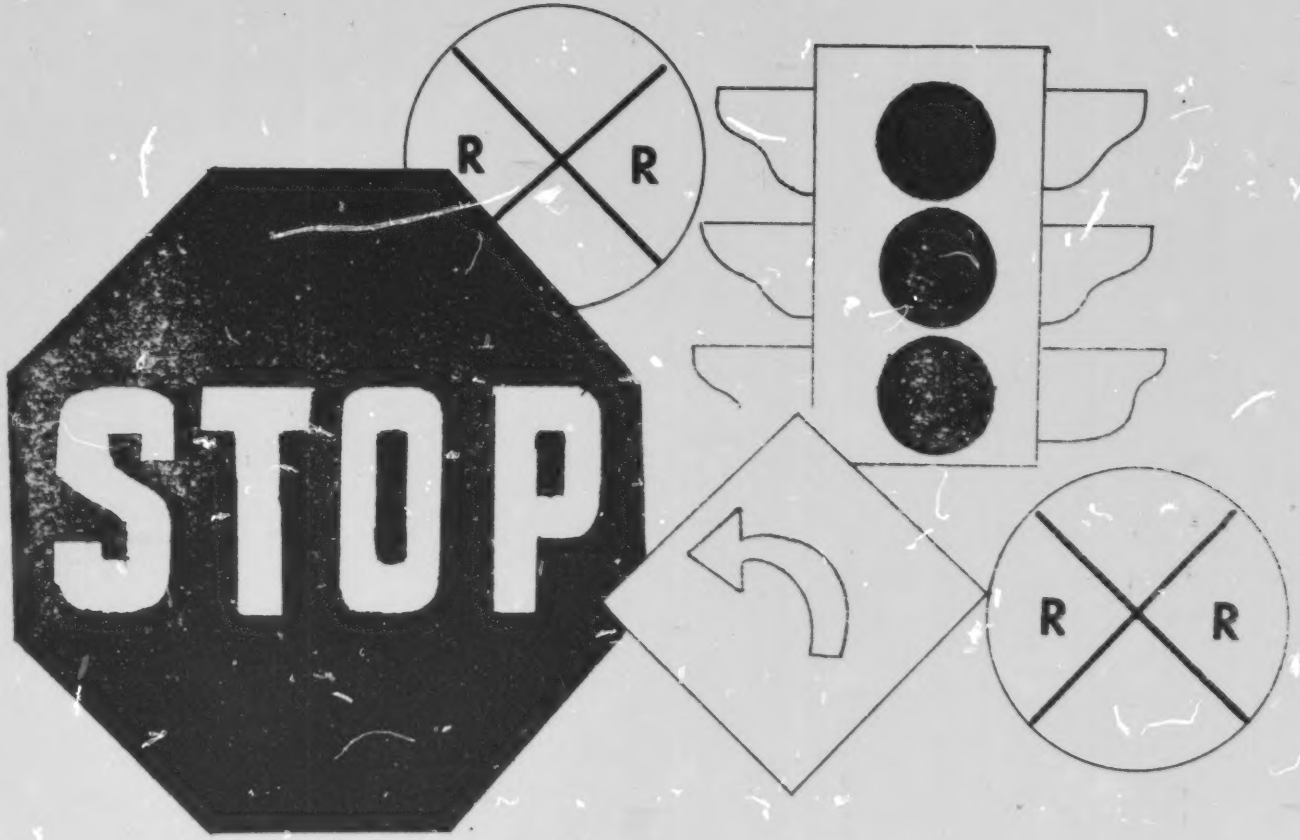
In typical programs, 5 hours are devoted to work on the driving range. This phase is optional, however, and can be omitted where range facilities are not available and regulations permit. (Parking lots and playgrounds--even nearby shopping center facilities--may be utilized effectively as driving ranges.)

When this part of the program is omitted, simulator instruction time is increased. (TYPICAL DRIVING RANGE LAYOUTS ARE FOUND IN APPENDIX C.)

Phase Four

Each student is given two or three hours of behind-the-wheel driving in actual traffic during this phase of instruction. Again, state regulations apply with respect to the number of hours.

The remaining hours in the phase are devoted to observation time in a driver education automobile.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PHASE ONE
Classroom Instruction

EVENT 1/Orientation And Placement

Objectives

1. To introduce the Cooperative Driver Education and Traffic Safety Program
2. To specify course content, procedures, and policies

Materials

Handouts (See Appendix B)

a. Teenage affidavits

b. Parental approval forms

c. Schedule of classroom events

d. Textbook, Sportsmanlike Driving, sixth edition

e. State driver's manual

Suggested Activities

1. Explain how to obtain learner's permit.
2. Explain the three-phase or four-phase program (whichever is applicable).
3. Explain course requirements (grading, attendance).

EVENT 2/Pre-Testing

Objective

To find out what the students know about driver and traffic safety

Materials (See Appendix B)

General knowledge pre-test (50 questions)

Suggested Activities

1. Administer the pre-test to all students without explanation.
2. Assign textbook, Chapter 1.

EVENTS 3&4/Psychology and Driving

Objectives

1. To provide students with basic knowledge concerning the importance of personality factors and safe behavior

2. To help students understand social pressures which can lead to dangerous driving

3. To help students understand how attitudes and emotions greatly affect driving performance

Materials

1. Films (See Appendix A)

   a. Attitude and Behavior of a Good Driver (AAA)
   b. Social Pressures (Drivocator)
   c. Attitude Emotions (Drivocator)
   d. Responsible Driver (Drivocator)
   e. Look Who's Driving (Misc. Films - 19)
   f. To See Ourselves (Misc. Films - 20)
   g. Your Responsibility as a Driver (Misc. Films - 23:9)

2. Textbook, Chapter 1

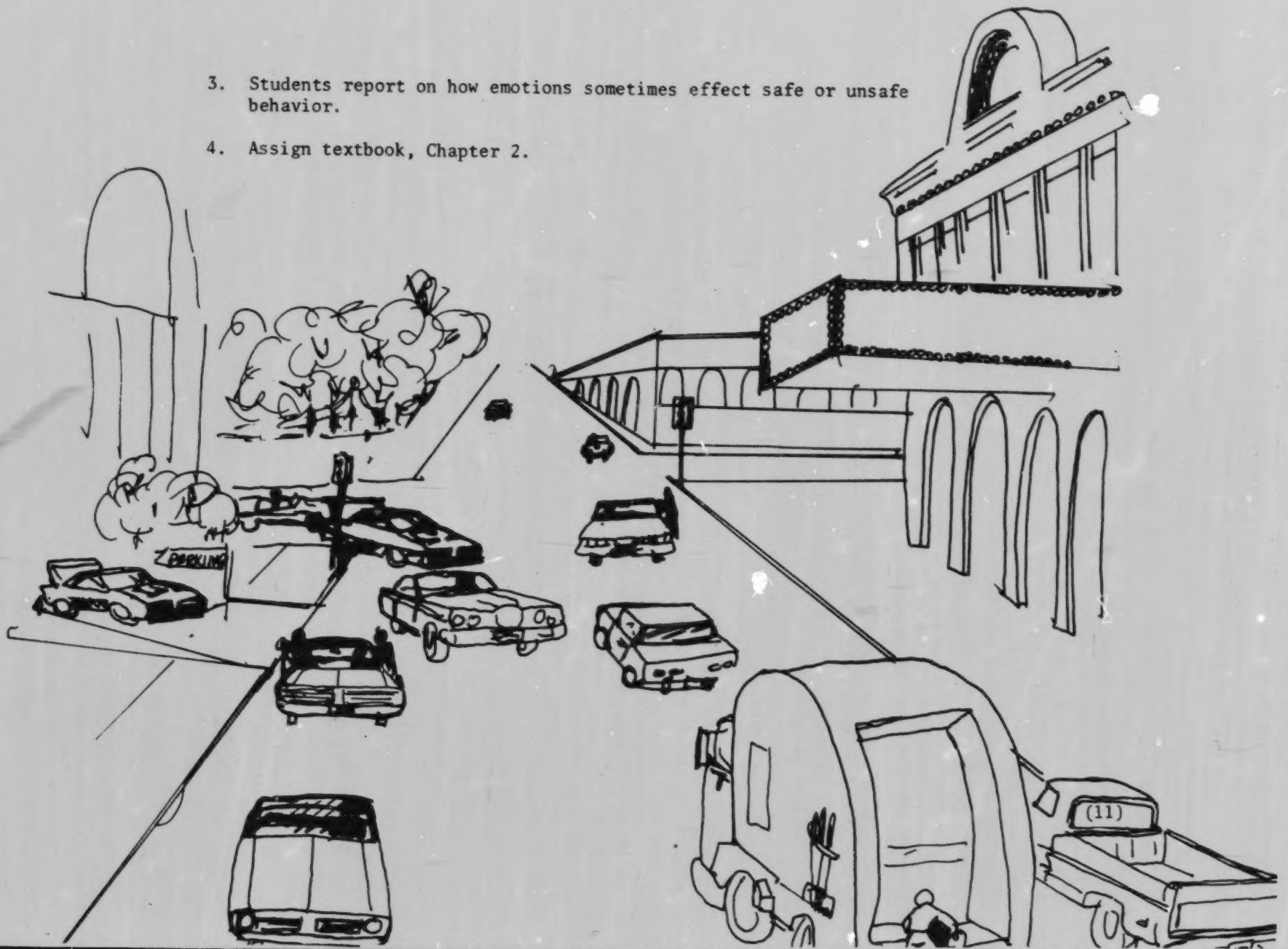
Suggested Activities

1. Arrange student role-playing (egotist, rationalist, etc.) session.

2. View films (Discussion afterward).

3. Students report on how emotions sometimes effect safe or unsafe behavior.

4. Assign textbook, Chapter 2.



EVENT 5/Physical Fitness

Objectives

1. To impart to the student the relationship between health and good driving ability

2. To show students that many physical impairments can be compensated for in driving

Materials

1. Films (See Appendix A)

   a. Night Driving and Seeing (AAA)
   b. Reaction, Braking and Stopping Distances (AAA)
   c. How to Follow Safely (National Safety Council)
   d. Psychophysical Factor (Drivocator)
   e. You as a Driver (Misc. Films - 23:1)

2. Textbook, Chapter 2

Suggested Activities

1. View films.

2. Discuss pros and cons of compulsory physical examination for drivers.

3. Compare fitness requirements for pilots and drivers.

4. Assign textbook reading, Chapter 3.

5. Discuss age and driving (should old people drive?).

EVENT 6/Driver Evaluator Testing

Objectives

1. To test students' color vision, visual acuity, depth perception, and field of vision
2. To test students' reaction time

Materials (See Appendix C)

1. Driver evaluator
2. Brake reaction time tester
3. Psychophysical Test Results Form (See Appendix B)

Suggested Activities

1. Test all students.
2. Compare with students the different reaction time among individuals and discuss ramifications of this fact.
3. Alert students who may have a visual problem and not be aware of it.
4. Explain ways to compensate for some visual problems.
5. Assign textbook, Chapter 3.

EVENT 7/Get The Big Picture

Objective

1. To demonstrate to students the importance of good visual habits in driving

Materials

1. Films (See Appendix A)

   a. Smith System (Misc. Films - 7)
   b. Night Driving (Misc. Films - 24:9)

2. Handout: The Eyes Have It (See Appendix B)

Suggested Activities

1. View Smith System.

2. Students memorize five seeing steps in The Eyes Have It.

3. Explain steps to take when meeting cars with "glare" lights at night.

4. Have class criticize Mr. Smith's activities as he drives in film.

EVENTS 8&9/The Accident Problem

Objectives

1. To illustrate the dangers of alcohol and drugs
2. To present to students facts showing the primary causes of accidents
3. To illustrate the tragedy of needless accidents upon real people

Materials

1. Films (See Appendix A)
   a. David Hall Story (Misc. Films - 3)
   b. No Accident (Misc. Films - 5)
   c. Final Factor (Misc. Films - 4)
   d. Safety First, Second, Third (Misc. Films - 6)
   e. Challenge of Traffic (Drivocator)
   f. Drivin' and Drinkin' (Misc. Films - 13)
   g. A Matter of Judgment (Misc. Films - 18)
   h. Why Wear Seat Belts? (Coxco)
2. Booklets or Handouts (See Appendix B)
   a. Accident statistic booklets (local, state, or federal)
   b. Test Your A.Q. (AMA)
   c. Local newspapers

3. Textbook, Chapter 4

Suggested Activities

1. Have guest speakers (traffic judge, police officer).

2. View films.

3. Discuss auto accidents in community and how they could have been avoided.

4. Discuss dangers of alcohol and driving.

EVENT 10/Motorcycle Safety

Objectives

1. To develop student awareness of the unique features and problems of motorcycle driving

2. To help students acquire the necessary skills to operate a motorcycle safely

Materials

1. Films (See Appendix A)

   a. Background to the Motorcycle (Misc. Films - 15)
   b. Operation of the Motorcycle (Misc. Films - 17)
   c. Natural Forces and the Motorcycle (Misc. Films - 16)

2. Textbook, Chapter 20

Suggested Activities

1. View films.

2. Discuss with students the basic dangers of motorcycle riding.

EVENTS 11&12/Man-Made Traffic Laws

Objective

1. To be sure that, upon completion of these events, the students have satisfactory knowledge of:

   a. rights-of-way rules
   b. signs and signals
   c. rules of the road
   d. speed limits
   e. accident responsibilities (first aid)
   f. Licensing procedures

Materials

1. Films (See Appendix A)

   a. Motor Vehicle Laws (AAA)
   b. Stay Right, Stay Safe (National Safety Council)
   c. What Right of Way? (National Safety Council)
   d. Signs of Life (Drivocator)
   e. Rules of Road (Drivocator)
   f. We Drivers (Misc. Films - 8)
   g. Using the Rules of the Road (Misc. Films - 23:5)

2. State driver's manual

3. Magnetic traffic boards (model cars)

4. Language Master (card questions - see Appendix C)

5. Textbook, Chapter 7

6. Handout: Driver Education Accident Report

Suggested Activities

1. Have students demonstrate knowledge of right-of-way rules using magnetic traffic board.

2. View films.

3. Class discussion: Why drive on the right-hand side of the road?

4. Have students illustrate correct signaling procedures, passing, and lane-changing.

5. Give quiz on signs and signals.

EVENTS 13&14/Nature's Traffic Laws

Objectives

1. To demonstrate the effects of friction, kinetic energy, and force of impact, gravity, and inertia on the driving process

2. To stress to students the knowledge that every time one viclates a natural law when driving one has to pay for it

3. To teach students braking and stopping distances, how to determine force of impact, and how to calculate reaction time

Materials

1. Films

   a. Traffic Laws Made by Nature (AAA)
   b. Reaction, Braking and Stopping Distances (AAA)
   c. Forces of Nature I (Drivocator)
   d. Forces of Nature II (Drivocator)
   e. Mathematics of Disaster (Misc. Films - 21)
   f. Natural Forces and the Motorcycle (Misc. Films - 16)
   g. Natural Laws (Misc. Films - 23:4)

2. Textbook, Chapters 5 and 6

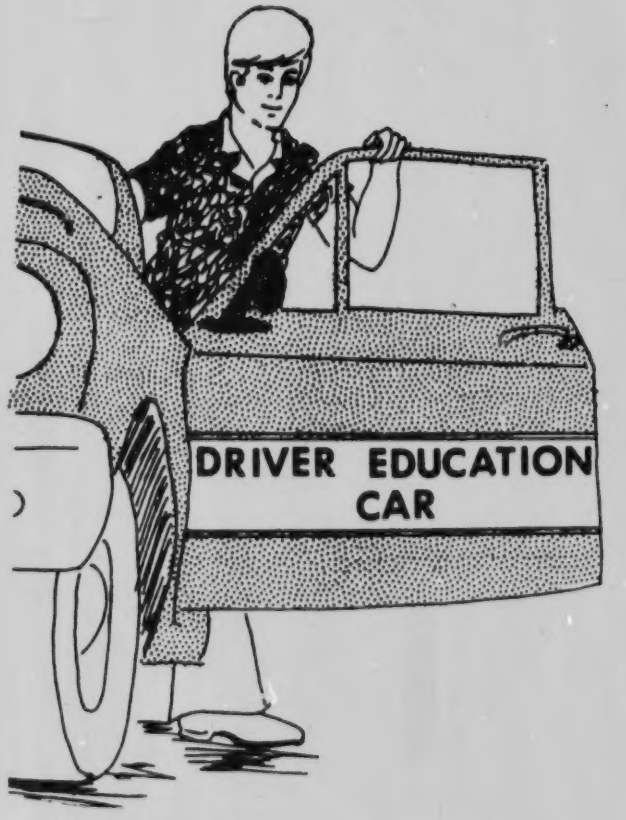
Suggested Activities

1. Conduct brake detonator demonstration with class.

2. View films.

3. Discuss nature's laws and highway construction.

4. Discuss one-car accidents and nature's laws.



EVENT 15/Driving In The Country

Objective

1. To teach students the hazards of rural driving

Materials

Films (See Appendix A)

a. Urban and Suburban Driving Hazards (35 mm filmstrip) (Misc. Films - 10)
b. Driving in the Country (AAA)
c. Open Road (Drivocator)
d. Situations on Rural Roads and Highways (Misc. Films - 23:8)

Suggested Activities

1. View film.
2. Students discuss or give reports on hazards of rural driving.
3. Explain safety procedures when meeting animals in roadway.

EVENT 16/Driving In The City

Objectives

1. To teach students to recognize and cope with hazards peculiar to urban driving

2. To have students demonstrate proper knowledge of lane-changing, lane-selection, parking maneuvers, and sign and signal meanings

3. To help students develop ability to recognize potential traffic hazards

Materials

Films (See Appendix A)

a. Preventable or Not? (National Safety Council)
b. How to Follow Safely (National Safety Council)
c. Don't Be a Sitting Duck (National Safety Council)
d. Stay Right, Stay Safe (National Safety Council)
e. What Right of Way? (National Safety Council)
f. The Art of Being Passed (National Safety Council)
g. Driving in Cities and Towns (AAA)
h. City Driving (Drivocator)
i. Situations in City Driving (Misc. Films - 23:6)

Suggested Activities

1. View films.

2. Have students give reports on proper driving procedures in urban areas.

3. Demonstrate procedures, using model cars on traffic boards, for:

   a. lane-use and lane-changing
   b. following distance
   c. danger signs

4. Review right-of-way rules.

5. Discuss pedestrian rights, multiple-lane driving, and one-way streets.

EVENT 17/Local Hazard Study

Objectives

1. To encourage students to inspect critically their communities for traffic hazards
2. To enable students to offer possible solutions for local hazards

Materials

1. Poster paper
2. Video-tape equipment
3. Polaroid camera
4. Cassette recorder

Suggested Activities

1. Have students give reports in the form of:
   a. video-tape program of hazards, directed by students,
   b. poster drawings of local hazards and possible solutions,
   c. interviews of drivers by students.

EVENT 18/Evaluation Of Previous Events

Objective

1. To ascertain students' knowledge of preceding events

Materials

1. Objective test of teacher's choosing
2. Film

Suggested Activities

1. Administer test to students.
2. If time allows go over questions and answers.
3. View film not previously available.

EVENTS 19&20/Adverse Driving Conditions

Objective

1. To develop skills needed for driving safely in adverse weather conditions

Materials

1. Films (See Appendix A)

   a. Driving in Bad Weather (Misc. Film - 1)
   b. Night Driving and Seeing (AAA)
   c. Adverse Driving Conditions (Drivocator)
   d. Final Factor (Misc. Films - 4)

2. Textbook, Chapter 11

3. Charts on braking distances under different road conditions

Suggested Activities

1. Demonstrate, using model cars, how to recover from skids.

2. Explain dangers of overpowering, overbraking, and oversteering on slippery roads.

3. Students give reports on winter driving safety factors

   a. car maintenance,
   b. carbon monoxide dangers,
   c. safety equipment for winter driving.

4. Students discuss hydroplaning, driving where there is poor visibility, and other special areas.

5. Review students on driving too fast for conditions.

6. View film.

EVENT 21/Driving Emergencies

Objectives

1. To develop the ability to respond quickly and correctly to unpredictable and sudden traffic hazards

2. To describe the safety steps to follow in emergency situations

Materials

1. Films (See Appendix A)

   a. Advanced Driving (AAA)
   b. Driving Emergencies (Drivocator)
   c. Final Factor (Misc. Films - 4)
   d. Defensive Driving (Misc. Films - 24:10 and National Safety Council Series)

2. Handout: Emergency Situations and How to Adjust to Them (See Appendix B)

Suggested Activities

1. Have students memorize steps to follow when confronted with the following emergencies and others:

   a. blowout,
   b. brake failure,
   c. forced off payment,
   d. accelerator sticks.

2. View films.

EVENT 22/Freeway And Interstate Driving

Objectives

1. To teach students how to get on and off interstate highways safely (acceleration and deceleration lane use)

2. To enable students to recognize hazards of interstate driving (highway hypnosis, velocitizing, etc.)

Materials

1. Films (See Appendix A)

   a. Freeway Driving is Different (Misc. Films - 2)
   b. Highways and Byways (35 mm filmstrip) (Misc. Films - 11)
   c. Open Road (Drivocator)
   d. Situations on Controlled Access Highways (Misc. Films 23:7)
   e. Limited Access Highways (35 mm filmstrip) (Misc. Films - 12)

2. Textbook, Chapter 10

Suggested Activities

1. Students demonstrate proper use of on-off ramps with traffic board and model cars.

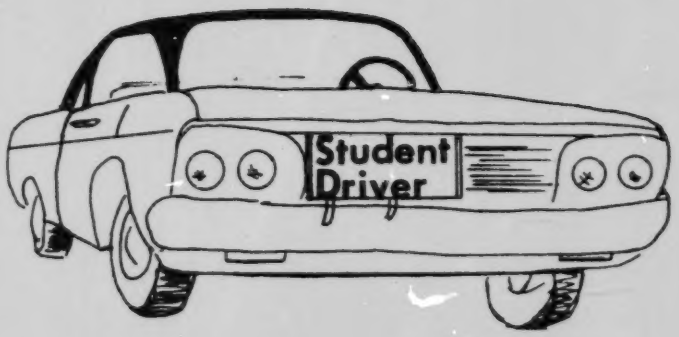
2. View film.

3. Discuss special characteristics of interstates.

4. Discuss car preparation for interstate driving.

5. Students give reports on:

   a. highway hypnosis,
   b. velocitized driver,
   c. emergency stop procedures on interstates,
   d. advantages and disadvantages of freeway use.



EVENT 23/Insurance And Buying A Car

Objectives

1. To impress upon students the importance of having adequate automobile insurance

2. To enable students to select their first car with some confidence

Materials

1. Films (See Appendix A)

   a. Buying and Insuring Your Car (AAA)
   b. Responsible Driver (Drivocator)
   c. So You Want to Buy a Used Car? (Misc. Films - 22)
   d. Negligence and Liability (Misc. Films - 24:12)

2. Booklet on car insurance

3. Textbook, Chapter 17

Suggested Activities

1. Arrange for guest speakers (lawyer, insurance salesman, car dealer).

2. View films.

3. Have students report on types of insurance coverage needed.

4. Have students debate "no-fault" insurance.

EVENT 24/Car Maintenance

Objectives

1. To teach students the correlation between accidents and car maintenance

2. To enable students to conduct necessary preventive maintenance on their or parents' car

Materials

1. Films (See Appendix A)

   a. How the Automobile Runs (AAA)
   b. Taking Care of Your Car (AAA)
   c. Love that Car (Misc. Film - 14)
   d. So You Want to Buy a Good Used Car? (Misc. Films - 22)

2. Textbook, Chapter 16

Suggested Activities

1. Have students practice maintenance procedures on driver education car:

   a. check oil, water, master cylinder, transmission fluid, tire pressure, fan belt, battery, windshield wipers,

   b. practice changing tires.

2. Explain how to recognize car trouble symptoms:

   a. wheel alignment,
   b. brake failure,
   c. power steering,
   d. tire tread.

EVENT 25/Range And (Or) Simulation Introduction

Objective

1. To introduce range and simulation procedures to students so that they will understand how they will use them

Materials

1. Films (Appendix A)

   a. Getting Ready to Drive (AAA)
   b. Fundamental Driving Techniques (AAA)
   c. Basic Maneuvers I (AAA)
   d. Video tape recordings of ranges in use
   e. Let's Start Driving (simulation film)

2. Handouts

   a. Procedure sheets for simulation and range instruction
   b. Range drawings

Suggested Activities

1. View (by video tape) range site and inside of simulator van.
2. Go over procedure sheets with students.
3. Explain range safety rules and special vocabulary terms to students.
4. View film.

EVENT 26/Precise Maneuvers

Objective

1. To develop correct procedures for angle and parallel parking, backing, and three-point turn-around

Materials

1. Films (See Appendix A)

   a. Basic Maneuvers I (AAA)
   b. Basic Maneuvers II (AAA)
   c. Parking (Simulation film)
   d. In Reverse (Simulation film)
   e. Precise Maneuvers (Drivocator)
   f. Parking (Misc. Films - 24:11)

2. Car Models

Suggested Activities

1. View film.

2. Demonstrate with model car how to park correctly:

   a. parallel,
   b. angle,
   c. on hills,
   d. three-point turn-around.

3. Through mimetic drills, practice correct body position for backing car.

EVENT 27/Classroom Events Review

Objective

1. To review with students all important information covered in previous events

Materials (See Appendix B)

1. Possible test questions (handouts)

Suggested Activities

1. Go over possible test questions with students.
2. View film not previously available.

EVENT 28/Final Test

Objective

1. To determine the students' understanding of traffic safety

Materials

1. Pre-test, used as part of final.
2. Test of teacher's choice.

EVENT 29/Grouping Students For Simulation, Range And Behind-The-Wheel

Objective

1. To divide students into homogeneous groups. Grouping makes it possible to gear the remaining phases for the beginner, the intermediate, and the advanced student. Besides making the remaining phases more meaningful to the student, it also makes it easier to schedule daily lessons.

Materials

1. Handouts (See Appendix B)

   a. schedule sheets
   b. student group sheets

Suggested Activities

1. During this session, the instructor divides the class into three or four groups, depending on the class size. For example, a class of 24 students might be divided thusly:

   Group A - Eight students who have the least driving experience and who, in the teacher's judgment, will require the most help in the remaining phases,

   Group B - Eight students who have some driving experience,

   Group C - Eight students who have the most driving experience, who may already be licensed drivers, and who made the best grades in the classroom phase.

EVENT 30/Review Final Test Grades With Class

Objective

1. To enable students to know the correct answers to test questions before they leave the classroom phase and begin the other phases

Materials

1. Final Test

Suggested Activities

1. Answer student questions about test and explain again procedures for beginning other phases.

PHASE TWO
Driving Simulation

Five-Event Simulation Schedule
(Driving Range Available)

For schools having access to range instruction, the number of simulation hours is five per student. Each event or hour should require one class period for completion. The student activities are listed in a sequential form which the instructor may follow in teaching the events. The names of each event are the same as film titles used in the Allstate Good Driver Training Simulation System (See Appendix A). To offer simulation to more than one school, a 12 or 14 unit mobile simulator is required (See Appendix C). Complete mobile simulator specifications are included in the Coordinator's Guide.

EVENT 1/The Good Turn

Student Activities

a. Predriving, moving and starting, and stopping procedures, with emphasis on proper braking
b. Explain and demonstrate
    1. left-hand turn (stress needed to scan entire screen)
    2. right-hand turn
c. Drill on usage
    1. Predriving procedures
    2. Starting the engine
    3. Moving procedures
    4. Stopping procedures
    5. Lane-changing procedures
d. Let students drive to subjective part of film

EVENT 2/Moderate Traffic and Hit The Highway

Student Activities

a. Review turns with demonstration, explanation, and drill

b. Drill on lane-changing procedures
c. Drive to film, allowing time for stops as needed
d. Drill on passing procedures (stress getting the big picture)
e. Begin film and stop as needed to stress points

EVENT 3/Hazardous Situations

Student Activities

a. Discuss type driving that will be done and possible hazards that can occur
b. Discuss importance of vehicle maintenance in preventing many hazardous situations
c. Review driving procedure when confronted with hazardous situations, such as:

    1. blow out
    2. tires off pavement
    3. emergency vehicles
    4. car on fire

d. Begin film and stop as needed to stress points

EVENT 4/Advanced City Driving

Student Activities

a. Review

    1. traffic control devices
    2. one-way street driving techniques
    3. pedestrian right-of-way

b. Drive to film

c. Repeat driving segment if time permits

EVENT 5/Expressways Are Different and Drive In Review

Student Activities

a. Review peculiarities of expressways in comparison with ordinary highways
b. Drive to film and stop at points of emphasis
c. Explain that this film is an evaluation of progress in simulation
d. Drive to film
e. Repeat driving segment if time permits

Nine-Event Simulation Schedule

(Driving Range Unavailable)

If a school or schools in the Cooperative do not have access to a range, the number of simulation hours is increased from five to nine and should include the following events:

EVENT 1/Let's Start Driving

Student Activities

a. Discuss
   1. advantages of simulation
   2. differences between simulation and automobile
   3. rules for care of simulator
b. Drill on usage
   1. predriving procedures
   2. starting the engine
   3. moving procedures
   4. stopping procedures
   5. lane-changing procedures
c. Let students drive to subjective part of film

EVENT 2/The Good Turn

Student Activities

a. Review predriving, moving and starting, and stopping procedures, with emphasis on proper braking
b. Explain and demonstrate the left-hand turn (stress need to scan entire screen)

c. Begin film, let students drive to it, but stop as necessary for additional instruction
d. Repeat driving segment if time permits

EVENT 3/Moderate Traffic

Student Activities

a. Review turns with demonstration, explanation, and drill
b. Drill on lane-changing procedures
c. Drive to film, allowing time for stops as needed
d. Repeat driving segment if time permits

EVENT 4/Hit The Highways

Student Activities

a. Drill on passing procedures (stress getting the big picture)
b. Discuss legal aspects of passing
c. Begin film and stop as needed to stress points
d. Repeat driving segment if time permits

EVENT 5/Hazardous Situations

Student Activities

a. Discuss type driving that will be done and possible hazards that can occur
b. Discuss importance of vehicle maintenance in preventing many hazardous situations

c. Review driving procedure when confronted with hazardous situations, such as:
   1. blow out
   2. tires off pavement
   3. emergency vehicles
   4. car on fire
d. Drive to film and stop as needed to stress points

EVENT 6/Winterproof Your Driving

Student Activities

a. Allow students to explain
   1. skid recovery procedures
   2. danger of quick driving actions (braking, stopping)
b. Drive to Winterproof film

EVENT 7/Advanced City Driving

Student Activities

a. Review
   1. traffic control devices
   2. one-way street driving techniques
   3. pedestrian right-of-way
b. Drive to film
c. Repeat driving segment if time permits

EVENT 8/Expressways Are Different

Student Activities

a. Review peculiarities of expressways in comparison with ordinary highways
b. Drive to film and stop at points of emphasis

EVENT 9/Drive In Review

Student Activities

a. Explain that this film is an evaluation of progress in simulation
b. Drive to film
c. Repeat driving segment if time permits

PHASE THREE
Range Instruction

Driving Range Instruction
(Optional Phase)

The multiple-car off-street driving practice phase requires eight to twelve driver education cars, depending upon the size of the range site. Also, there must be range communication equipment available as well as other materials, such as traffic cones, signs, etc. (See Appendix C). One instructor, with the aid of a paraprofessional or student aide, can easily and safely handle twelve cars simultaneously. The range events can be adjusted by adding exercises involving trailer-pulling, emergency evasive action maneuvers, etc. These alterations can be used to keep the advanced driver from becoming bored. Typical range layouts are included in Appendix C.

EVENT 1

a. range safety rules
b. pre-ignition procedures
c. starting procedures
d. stopping procedures
e. steering procedures
f. moving vehicle forward and backward

EVENT 2

a. review
b. driving around outer perimeter in a clockwise and counterclockwise direction
c. slalom course (forward and backward - figure-8 exercise)

EVENT 3

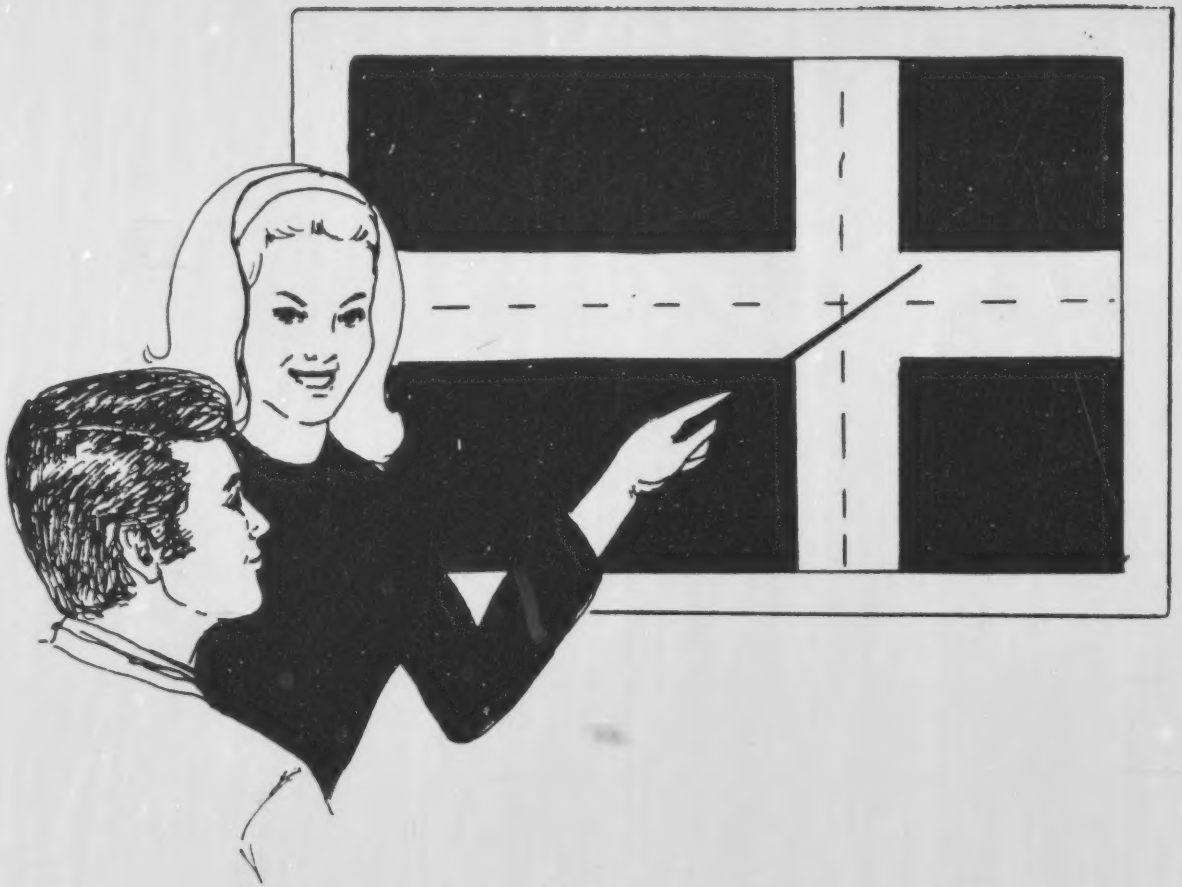
a. practical skill exercises
b. left- and right-hand turns and intersection maneuvers
c. lane-changing

EVENT 4

a. review
b. skill exercises
c. parking
d. opposing traffic

EVENT 5

a. off and on interstate
b. parking
c. review
d. opposing traffic
e. skills evaluation



PHASE FOUR
Behind-The-Wheel Instruction

Behind-The-Wheel Instruction

Detailed lesson plans for this instructional phase are not included here because facilities, hours, and student needs vary widely from program to program.

(For general information and assistance in preparation for this phase, typical behind-the-wheel lesson plans are included in Appendix F.)

It is important that each student's driving time include as many varied experiences as possible.

In schools not having access to range instruction, each student should receive a minimum of three hours behind the wheel. Where a range is available, students usually spend two hours on local streets and highways. (State regulations should be taken into consideration here.)

Each time the student drives the instructor will evaluate his or her performance using the "Behind-the-Wheel Checklist" (See Appendix B).

For safety, the driver education car should be equipped with appropriate AAA signs on each side and on the rear. Also, a dual control brake should be installed on the passenger side for emergency use by the instructor.

No more than four students should occupy the driver education car at one time.

APPENDIX A
Films And Filmstrips

AAA SPORTSMANLIKE DRIVING TELECOURSE SERIES

Each of these films is 30 minutes long, 16mm, and can be obtained from: AAA, 734 Fifteenth St., N.W., Washington, D. C. 20005.

How the Automobile Runs - Demonstrates and explains in simple language the generation and transfer of power to drive wheels and the proper operation and maintenance of car. Black and white.

Taking Care of Your Car - Emphasizes need for maintenance and its value in longer car life and safety during use. Black and white.

Attitude and Behavior of a Good Driver - Explores the characteristics of individuals which can cause poor driving practices. Attempts to give insight so students may avoid or overcome behavioral problems. Stresses example each driver is to his fellow drivers. Black and white.

Traffic Laws Made by Nature - Demonstrates simple laws of friction, gravity, inertia, and impact. Emphasizes results of violation of natural laws and value to driver of knowing and understanding these laws.

Motor Vehicle Laws - Detailed answers given to questions concerning driver's license, vehicular equipment, speed laws, road racing, reckless driving, signaling, traffic control devices, and various other violations which can result from lack of driver knowledge and understanding. Black and white.

Getting Ready to Drive - Demonstrates need for familiarity with car as well as routines which must become habitual to one beginning to drive. Color.

Fundamental Driving Techniques I - Gives proper procedures for starting and stopping car and techniques of signaling and observing. Emphasizes head and eye movements as well as hand and foot skills. Automatic transmission. Color.

Fundamental Driving Techniques II - Explains use of gears, procedures for starting standard transmission, and need for good hand-foot coordination. Color.

Basic Maneuvers I - Demonstrates backing and turning procedures and emphasizes need for practice. Color.

Basic Maneuvers II - Demonstrates basic skills needed for hill starts and parking. Includes information on standard transmission as well as on automatic. Color.

Advanced Driving - Illustrates well-known situations and little-known remedies for evasion of situation dangers. Emphasizes need for developing good judgment and awareness in defensive driving. Color.

Night Driving and Seeing - Illustrates many factors in night driving, ranging from effects of different light intensities on the eyes to defensive driving measures available. Includes instruction on proper use of sunglasses. Color.

Reaction, Braking, and Stopping Distances - Graphically illustrates concepts of car control and need for cushion of safety. Demonstrates brake detonator test. Black and white.

Driving in Cities and Towns - Demonstrates ten fundamental driving skills, such as adjusting speed for conditions, driving ahead on, and driving cooperatively. Emphasizes need for defensive driving and knowledge of basic skills first. Color

Driving in the Country - Cautions about over-relaxing at higher speeds and in less traffic on open roads. The points on communication with other drivers through signals and car position is followed by demonstrations of techniques of driving on curves, over hill crests, and returning to pavement after dropping off. Overtaking and passing are demonstrated, too. Color.

Buying and Insuring Your Car - Selection of a car for purchase is followed by discussion of various types of auto insurance and need for liability insurance. Black and white.

ALLSTATE Driver Trainer Simulation Films

Details about these films is available from General Precision System, Allstate, Link Division, Binghampton, New York 13902.

1. Let's Start Driving
2. The Good Turn
3. Moderate Traffic
4. Advanced City Driving
5. Hit the Highways
6. Expressways are Different
7. Shift for Yourself
8. Hazardous Situations
9. In Reverse
10. Parking
11. Driving After Dark
12. Winterproof Your Driving
13. Drive in Review

DRIVOCATOR SYSTEM FILMS

Information about films can be obtained from Raytheon Learning Systems Company, 475 South Dean Street, Englewood, New Jersey 07631.

DRIVOCATOR FILMS

*1. Forces of Nature I - 29 minutes

*2. Forces of Nature II - 29 minutes

3. Social Pressures - 20 minutes

4. Signs of Life - 27 minutes

5. Rules of the Road - 27 minutes

6. Challenge of Traffic - 29 minutes

*7. Psychophysical Factor - 29 minutes

*8. Basic Skills - 36 minutes

*9. Driving Emergencies - 24 minutes

*10. Adverse Driving Conditions

*11. City Driving - 20 minutes

*12. Attitude Emotions - 20 minutes

*13. Getting Ready to Drive - 36 minutes

*14. Precise Maneuvers - 29 minutes

*15. Open Road - 20 minutes

*16. Defensive - 20 minutes

17. Responsible Driver

*18. Missing Link - 29 minutes

*Wide Screen

NATIONAL SAFETY COUNCIL DEFENSIVE DRIVING SERIES

Each of these films is eight to nine minutes long. All are in black and white. With the exception of the first one, the same teacher is used to explain and demonstrate each point. The cars shown are out-dated and the films are aimed at an adult audience, primarily commercial drivers, but the information given is good and the points are well made. There are four complete sets of these films. Write to Journal Films, 909 West Diversey Parkway, Chicago, Illinois 60614.

1. Preventable or Not? - A professional driver learns how his recent accident (as well as several others demonstrated) could have been prevented.

2. How to Follow Safely - Clearly demonstrates the six possible collision situations connected with following. Also demonstrates and explains reaction time and braking distance with Detonator Test.

3. Don't Be a Sitting Duck - Shows the responsibilities of a driver to vehicles behind. Gives ways for that driver to show those behind what his intentions are and ways to keep them from following too close.

4. Stay Right, Stay Safe - Gives points to remember about keeping to the right of the road on straight-aways, curves, and at intersections.

5. What Right of Way? - Shows intersection collision possibilities and makes points to remember about approaching intersections and the potential dangers there.

6. The Art of Being Passed - Demonstrates and explains rules of being passed on left, changing lanes while being overtaken on inside lane, changing lane to make right turn, and moving from parking into flow of traffic.

MISCELLANEOUS FILMS

1. Driving in Bad Weather - 8 minutes - Color - Demonstrations and discussions of various types of bad weather driving and how to deal with each situation. Covers reduced visibility, loss of traction, hydroplaning, etc. Ford Motor Company Film Library, The American Road, Dearborn, Michigan 48121

2. Freeway Driving is Different - 15 minutes - Color - Demonstrates and explains safety features of freeways, traffic merging procedures, speed limits, lane changes, safe following distance, freeway hypnosis, and freeway exiting. A very good film which should hold students' interest throughout. Ford Motor Company Film Library, The American Road, Dearborn, Michigan 48121.

3. The David Hall Story - 27 minutes - Color - An excellent motiviating film on driving carefully, emphasizing defensive driving. Tells the tragedy of one teen-ager's life in his being thrown from a speeding car as it wrecks and becoming paralyzed. The explanation of his long and painful recovery, expensive hospitalization costs for his parents, and adjustments he had to make for a new way of life should impress students. Solana Studios, Box 1068, Naples, Florida 33940.

4. The Final Factor - 14 minutes - Color - Demonstrates and explains how many factors (and drivers) contribute and build up to an accident. Includes sequences on merging traffic and passing lane on freeway, night driving hazards, and bad weather dangers. AAA Foundation for Traffic Safety, 734 Fifteenth Street, N. W., Washington, D. C. 20005.

5. No Accident - 28 minutes - Color - Shows and explains many collision tests made at Ford Motor Company proving grounds. A bit commercial as it emphasizes what Ford is doing about the problems. Ford Motor Company Film Library, The American Road, Dearborn, Michigan 48121.

MISCELLANEOUS FILMS (Continued)

6. Safety First, Second, Third - 28 minutes - Color - Briefly covers three factors of traffic safety--driver, environment, and automobile--and deals with the last two extensively by showing various collision tests made at General Motors proving grounds and pointing out safety features built into proving grounds roads as a result of tests and also of safety features built into automobiles as a result of tests. GMC Public Relations Staff, Film Library, General Motors Building, Detroit, Michigan 48202.

7. Smith System of No Accident Driving - 28 minutes - Color - Demonstrates and explains Mr. Smith's theory of accident prevention. Gives his five points to remember for safe driving: (a) aim high in steering, (b) keep your eyes moving, (c) get the big picture, (d) leave yourself an out, and (e) ride on a cushion of space. Ford Motor Company Film Library, The American Road, Dearborn, Michigan 48121.

8. We Driver - 10 minutes - Color - Emphasis on expecting the unexpected. Gives a new viewpoint of clear vision in driving situations by using overhead shots from a helicopter. Shows expressway driving, turning, speed reaction time-visibility, intersection signals and signs, and pedestrian rights. GMC Public Relations Staff, Film Library, General Motors Building, Detroit, Michigan 48202.

9. Wheels of Tragedy - 27 minutes - Color - Shows veteran patrolman taking rookie on first weekend route during a long holiday weekend. Actual scenes are shown with all the gory detail of crushed and agonized victims. Possible causes of various accidents seen are presented in dramatic form. Very impressive film if instructor thinks students need "waking up" to the seriousness of driving. Highway Safety Foundation, Inc., Box 1563, Mansfield, Ohio 44907.

MISCELLANEOUS FILMS (Continued)

10. Urban and Suburban Driving Hazards - 35mm filmstrip - This filmstrip involves perception of traffic hazards in rural and city situations. Shell Oil Company, Center for Safety Education, New York University, New York, New York 10000.

11. Highways and Byways - 35mm filmstrip - This filmstrip involves perception of traffic hazards in highway situations. Shell Oil Company, Center for Safety Education, New York University, New York, New York 10000.

12. Limited Access Highways - 35mm filmstrip - This filmstrip involves perception of traffic hazards in interstate situations. Shell Oil Company, Center for Safety Education, New York University, New York, New York 10000.

13. Drivin' and Drinkin' - 14 minutes - Color - This film presents the facts about driving and drinking in an intelligent and soft-sell manner. Chevrolet Motor Division, General Motors Corporation, 465 West Milwaukee, Detroit, Michigan 48202.

14. Love That Car - 10 minutes - Color - A humorous approach to the importance of automobile maintenance. AIMS Instructional Media Services, Inc., Box 1010, Hollywood, California 90028.

15. Background to the Motorcycle - 14 minutes - Color - Points out the need for better motorcycle training and demonstrates basic riding techniques, attitudes, and the use and function of motorcycle controls. American Honda Motor Company, 100 West Alandra Blvd., Gardena, California 90247.

16. Natural Forces and the Motorcycle - 14 minutes - Color - Demonstrates natural forces that affect motorcycle riding, inertia, friction, gravity, force of impact, etc. American Honda Motor Company, 100 West Alandra Blvd., Gardena, California 90247.

MISCELLANEOUS FILMS (Continued)

17. Operation of the Motorcycle - 14 minutes - Color - Demonstrates accepted training methods to acquire basic and defensive riding skills and shows the fundamentals of safe motorcycle operation in traffic situations. American Honda Motor Company, 100 West Alandra Blvd., Gardena, California 90247.

18. A Matter of Judgment - 20 minutes - Color - Shown and explained are the proper operating procedures to be followed in all kinds of road traffic. Also demonstrated are the effects of weather, skidding, condition of tires, seat belts, etc. An excellent indoctrination for the beginner or for review. Highway Safety Foundation, Inc., Box 1563, Mansfield, Ohio 44907.

19. Look Who's Driving - 8 minutes - Color - This film is in cartoon animation and is useful in showing the effects of emotions on driving. Aetna Life and Casualty Company, 151 Farmington Avenue, Hartford, Connecticut 06115.

20. To See Ourselves - 14 minutes - Color - A very good film about psychology and driving. Aetna Life and Casualty Company, 151 Farmington Avenue, Hartford, Connecticut 06115.

21. Mathematics of Disaster - 28 minutes - Color - This film emphasizes nature's laws, the effects of alcohol, hydroplaning, etc. Great value for review. WGN, Continental Broadcasting Company, 2501 Bradley Place, Chicago, Illinois 60618.

22. So, You Want to Buy a Good Used Car? - 15 minutes - Color - This film offers a useful formula to a used car buyer, particularly a young person making his first purchase. The customer chooses the type car he wants and the amount he wants to spend. He uses important visual tips in making his decision. Ford Motor Company Film Library, The American Road, Dearborn, Michigan 48121.

23. Chevrolet Film Strip Series - 35mm - Color - Chevrolet Motor Division, General Motors Corporation, 465 West Milwaukee, Detroit, Michigan 48202:

    1. You as a Driver (includes 78 rpm record)
    2. The Engine that Powers the Car
    3. The Power Train
    4. Natural Laws that Govern Your Driving
    5. Using the Rules of the Road
    6. Situations in City Driving
    7. Situations on Controlled Access Highways
    8. Situations on Rural Roads and Highways
    9. Your Responsibility as a Driver (includes 78 rpm record)

24. Driver Education Slide System - 160 color slides with teaching guide. Designed specifically for daylight viewing on chalkboards or walls. With carousel and projector. Denoyer-Geppert Audio-Visuals, 5235 Ravenswood Avenue, Chicago, Illinois 60640.

    These slides cover:

    1. Natural laws (inertia, friction, gravity, impact, centrifugal force)
    2. Physical factors (alcohol, reaction time, following distances)
    3. Shift operations and gauges (instrument panel)
    4. Signs and signals (flashing lights, hand and electric signals, warning and regulatory signs)
    5. Pavement markings and lane positions (rules of road)
    6. Turning (left, right, U, Y turns)
    7. Intersection rules and procedures (right-of-way)
    8. Passing
    9. Night driving
    10. Defensive driving (emergency procedure)
    11. Parking
    12. Accident responsibility (procedures in case of accident, liability, negligence)
    13. Four different patterns of state highway intersections (illustrates your own traffic situations)

APPENDIX B
Student Handouts

DRIVER EDUCATION PROGRAM

PARENTS PERMISSION FORM

1. _____
(Student's Complete Name)

2. _____(I would like to be called)

3. _____ _____
(Address) (Telephone)

4. _____ _____ _____ _____
(Date of birth) (Age in years) (Months) (Classification)

5. I plan to take Driver Education the_____period.

6. I have a license dated_____ 7. I have a permit dated_____

8. If you do not have a permit, what is your birth certificate number_____

9. I have some driving experience_____Absolutely none_____

Explain_____

Signature_____
(Parent or guardian)

The cost is_____for a permit. The affidavit form must be signed with full names throughout, notarized, and presented to the Driver License Examiner with birth certificate. Form must be signed if student is under 18 years of age.

Please Note: All students and automobiles used in Driver Education Training are insured.

AFFIDAVIT OF PARENT CONSENT

1. One parent must accompany applicant to Examining Station.
2. Forms must have FULL NAMES throughout.
3. Forms must be NOTARIZED or signed in the presence of the Driver License Examiner.
4. No forms will be accepted or driver tests given until ALL forms are completed.
5. Each parent, guardian or adult must sign his or her own FULL NAME in ink. If for any reason only one parent or guardian is signing, the reason for the absent parent must be stated on the form.

YOU MUST BRING YOUR BIRTH CERTIFICATE WITH YOU TO THE EXAMINING STATION

STATE OF_____ COUNTY OF_____

I/we_____, make oath in due form of law that I/we are/am

the_____ of_____ whose date of birth
(relationship) (name of applicant)

is_____, and that I/we hereby join in the application of
(month) (day) (year)

said applicant for a driver's license. For and in consideration of the issuance of said license by the Department of Safety, I/we hereby accept all of the responsibilities and obligations imposed under the provisions of State Code Annotated, upon me/us as the parent/guardian of said applicant who is a person under the age of eighteen (18) years and fully understand and agree that any negligence or wilful misconduct of the said applicant while operating a motor vehicle prior to his/her eighteenth (18th) birthday shall be imputed to us/me and that we/I shall be jointly and severally liable with said applicant for any damages caused by his/her negligence or wilful misconduct while operating a motor vehicle.

_____
Full First, Middle and Last Name Dr. Lic. No. Relationship

_____
Full First, Middle and Last Name Dr. Lic. No. Relationship

Sworn to and subscribed before me this_____day of_____, 19_____.

NOTARY PUBLIC_____

My commission expires_____day of_____, 19_____.

This Affidavit must be signed by both parents and it must be Notarized

Driver Education Pre-Test

I. Multiple Choice

1. Should a quick stop be necessary on a slippery road surface, it is best to:
   a. Be sure a hand signal precedes brake application
   b. Alternately apply and release the foot brake, avoiding locking of the wheels
   c. Use the parking brake because it can stop the car in less distance than the foot brake.

2. Should someone say that you are "overdriving your headlights", it means that:
   a. You should clean the headlight glass
   b. The light beams are set too low, indicating need for adjustment
   c. You are looking too far ahead of the area illuminated by the headlights
   d. You cannot stop your car in the distance that the lights shine ahead

3. An approaching driver fails to use low beam headlights. The best thing to do is:
   a. Blow your horn and alternate between bright and dim headlights
   b. Alternate between parking lights and dim headlights
   c. Dim your headlights but flash a spotlight on the approaching vehicle
   d. Alternate once between dim and bright headlights and then place control in dim position.

4. Which of the following is LEAST likely to cause excessive engine temperatures?
   a. broken fan belt
   b. radiator clogged with insects
   c. worn brake linings
   d. insufficient water in radiator

5. What is the proper technique for turning the steering wheel when going around corners?
   a. both hands at top of wheel
   b. short, quick turns, two-handed light grip
   c. hand-over-hand, light grip
   d. twist arms around without moving hand position

6. Right-of-way rules determine:
   a. when a driver should yield to directions of traffic signals
   b. when certain laws are in effect
   c. that a driver must keep to the right
   d. traffic priority

7. What must you have in your possession and in the car in order to drive?
    a. the vehicle registration card and a certification of title
    b. your driver's license and learner's permit
    c. the vehicle registration card and bill of sale
    d. your driver's license and your vehicle registration card

8. Under what conditions are planks most dangerous to drive on?
    a. when wet and parallel to the direction of travel
    b. when wet and perpendicular to the direction of travel
    c. when wet and oblique to the direction of travel
    d. when wet, regardless of how they are laid

9. What is a major hazard in overbraking?
    a. the brake system may fail
    b. a tire may blow out
    c. the wheels may lock and cause a skid
    d. the brake system may be greatly weakened for later use

10. At which of the following temperatures is ice on the road most dangerous?
    a. 32 degrees above zero
    b. 10 degrees above zero
    c. 10 degrees below zero
    d. zero

11. "Last clear chance" is associated with:
    a. right-of-way laws
    b. official signs or signals
    c. bridges across navigable waters
    d. responsibility for accidents

12. A key word in deciding at what speed to drive is:
    a. police
    b. points
    c. fines
    d. conditions

13. Before backing the car out of a garage or driveway, the first thing to do is:
    a. obtain the most efficient position for driving and visibility
    b. make sure emergency brake is released
    c. check mechanical condition of car
    d. check behind the car

14. Which shows a driver to be expert in meeting sudden adverse conditions?
    a. he is able to stop his car quickly because of his reaction time.
    b. he is exceptionally accurate in his steering
    c. he is able to manipulate his vehcile easily
    d. he anticipates these conditions and is prepared to respond properly

15. By which means can you best control the effects of centrifugal force, kinetic energy, and force of impact while driving?
    a. steering
    b. braking
    c. speed
    d. use of the transmission

16. Which is considered the most important automobile insurance to carry?
    a. property damage
    b. collision
    c. liability
    d. comprehensive

17. Why are insurance premiums generally higher when a car is to be driven by someone under 25?
    a. young people tend to go to college and out of agents territory
    b. in several states this is the law
    c. driving records of too many young people have resulted in claims
    d. many young people solo drive when they do not have licenses

18. The most frequent cause of traffic accidents is?
    a. the driver
    b. unfit cars
    c. poor roads
    d. inclement weather

19. In which direction will a car go when the top of the steering wheel is turned to the right?
    a. to the left going both backward and forward
    b. to the right only when going backward
    c. to the right only when going forward
    d. to the right going both backward and forward

20. What should be the first step when starting any car with an automatic transmission?
    a. set the parking brake
    b. put selector in D position
    c. check oil pressure
    d. put selector in R position

21. If the engine of an automatic transmission car fails to start because of "flooding" what should you do?
    a. pump the accelerator pedal gently while starting
    b. close the throttle almost entirely while starting
    c. hold the accelerator pedal to the floor while operating the starter
    d. pull the choke all the way out while starting

22. How should a driver check his blind spot?
    a. slow down while looking at the rear-view mirror
    b. look at the rear-view mirror for several seconds
    c. turn head and check to the left or right rear
    d. speed up while looking at the rear-view mirror

23. Left turns on two way four lane streets are started from the lane:
    a. immediately to the right of the center line
    b. next to parked cars on the left side of the street
    c. immediately to the left of the center line
    d. the center lane

24. When the right wheels of a car go off the pavement, what is the correct way to get them back on?
    a. slow down and then gradually turn the front wheels to the left
    b. continue at present speed and turn the front wheels to the left
    c. slow down and then turn the front wheels sharply to the left
    d. continue at present speed and gradually turn the front wheels to the left

25. What should you do to maintain the same degree of safety in your night driving as in your day driving?
    a. wear tinted glasses to reduce glare
    b. drive close to the center of the road
    c. reduce the speed at which you drive
    d. keep your eyes directed slightly toward the left side of the road

26. If two cars arrive at an intersection at the same time the
    a. car turning right has the right-of-way
    b. driver on the right should be given the right-of-way
    c. car going the fastest has the right-of-way
    d. driver on the left should be given the right-of-way

27. The yellow light on a traffic signal means
    a. go if there is no other traffic
    b. be prepared to stop or clear the intersection
    c. get ready to go
    d. proceed with caution

28. A green arrow pointing right used with a red light means
    a. no one must stop
    b. all motorists must yield before turning right
    c. all motorists must stop except those turning left
    d. all motorists must stop

29. A flashing red light means
    a. stop as long as the light is flashing
    b. slow down
    c. stop and proceed with caution if the way is clear
    d. slow down and proceed with caution if the way is clear

30. When entering an expressway you must
    a. stay in the acceleration lane and increase speed to that of the other vehicles
    b. stop at end of acceleration lane if unable to merge
    c. drive into a traffic lane immediately, because other traffic will move over for you
    d. stop and wait for an opening in traffic

II. Matching

_____1.	Peripheral vision	a. The ability to see details accurately
_____2.	High-aim steering	b. a device that records the total mileage traveled
_____3.	Hydroplaning effect	c. transfers power from the engine to the drive shaft and rear axle, regulating wheel speed through the use of gears
_____4.	Perception	d. covers damage to a car from causes other than collision
_____5.	Highway Hyponsis	e. an area obscured from the driver's vision by a part of the car
_____6.	Blind spot	f. staring blindly with a blank stare
_____7.	Visual acuity	g. driving so fast on wet pavement that a cushion of water builds up under the tires
_____8.	Transmission	h. seeing and identifying an object or hazard
_____9.	Odometer	
___10.	Comprehensive	

(con't)

i. fuzzy, un-clear vision that detects objects in the upper, lower, and side range of vision

j. keeping vision directed well ahead and at the center of the intended lane

III. True or False

_____1. Carbon monoxide is easily detected by its color and smell

_____2. The "staggering" drunk is the most dangerous type of drunk driver

_____3. A pedestrian should always walk on left side of road facing oncoming traffic

_____4. When stuck in deep snow, the best way to try to get out is to "rock" the car

_____5. The best thing to do when someone is "tailgaiting" your car is to tap brakes lightly and speed up.

_____6. If the vehicle ahead is turning right you should signal right to warn drivers behind

_____7. Interstate 4 runs generally north and south

_____8. A glowing oil pressure light means you should always add oil

_____9. A three digit interstate number means that it runs around the perimeter of a city

____10. Driving an automobile is a privilege not a right

Driver Education Pre-Test Answer Sheet

I. Multiple Choice

1.	B	11.	D	21.	C
2.	D	12.	D	22.	C
3.	D	13.	D	23.	A
4.	C	14.	D	24.	C
5.	C	15.	C	25.	C
6.	D	16.	C	26.	B
7.	D	17.	C	27.	B
8.	A	18.	A	28.	B
9.	C	19.	D	29.	C
10.	A	20.	A	30.	A

II. Matching

1.	I
2.	J
3.	G
4.	H
5.	F
6.	E
7.	A
8.	C
9.	B
10.	D

III. True - False

1.	F
2.	F
3.	T
4.	T
5.	F
6.	F
7.	F
8.	F
9.	T
10.	T

PSYCHOPHYSICAL TEST RESULTS FORM

Name _____ School _____

I. Field of Vision

R____ L____ R____ L____ Total Letter Rating_____

II. Color Vision Letter Rating_____

III. Distance Judgment

Correct Near of 8 Trials_____ Correct Far of 8 Trials_____ Total_____

Letter Rating_____

IV. Visual Acuity

Number of Letters Read Correctly_____ Letter Rating_____

V. Reaction Time

1._____ 6._____

2._____ 7._____

3._____ 8._____

4._____ 9._____

5._____ 10._____

Total_____ Letter Rating_____

Composite Letter Rating_____

THE EYES HAVE IT

or

HOW TO SEE AND WHAT TO LOOK FOR WHILE DRIVING

To drive expertly, you need to carry out 5 Seeing Steps that let you read the traffic picture quickly.

The 5 Seeing Steps

1. AIM HIGH IN STEERING - Look ahead when driving, at least a block in front of you. When turning corners watch well ahead along the center of your turning path and you will turn smoothly and safely.

2. GET THE BIG PICTURE - Keep your central vision scanning a wide deep roadway scene. Use your peripheral vision (side vision)

3. KEEP YOUR EYES MOVING - A fixed stare at any object while driving is very hazardous. Force your eyes to move at least every two seconds in driving. Check rear mirrors often.

   (Moving your eyes is restful and cuts down eye fatigue, a common cause of accidents.)

4. MAKE SURE THEY SEE YOU - When possible conflicts could occur, communicate with other cars by 1) Signals, 2) Eye Contact, and 3) Horn. Use any or all of the above when necessary.

5. LEAVE YOURSELF AN OUT - Keep a cushion of space between you and other cars; a foot lightly on the brake when approaching a dangerous intersection is a good example. Keep a swerving space open as often as you can.

IN TENNESSEE, FOR EXAMPLE, MOST FATAL ACCIDENTS WERE CLOSE TO HOME

Eighty per cent of Tennessee's 1363 traffic fatalities in 1970 were the result of automobile accidents which took place within 25 miles of the driver's home.

Seventy-five per cent of the traffic fatalities were men.

Other facts revealed in a recent survey included:

1. Of the vehicles involved in fatal accidents last year, 34 per cent were traveling at speeds between 40 to 50 miles per hour and 48 per cent were exceeding safe speeds.

2. Of the 1363 killed, 30 per cent were under the age of 25.

3. Pedestrians died in 12 per cent of the fatal accidents.

4. More than half of the fatal accidents, 53 per cent occurred during daylight hours and 45 per cent occurred on weekends.

5. Seven of every 10 fatal traffic accidents occurred on rural roads.

There are 2,083,251 licensed drivers in the state and 2,435,000 registered motor vehicles.

More than 9,000 Tennesseans lost their privilege to drive in 1970 - 7,135 for driving while under the influence of an intoxicant.

EMERGENCY SITUATIONS AND HOW TO ADJUST TO THEM

1. ANIMALS ON THE ROAD
   Don't spare the animals for human lives. Avoid the animal if doing so will not cause you to become involved in an accident.

2. BRAKES FAIL
   Take foot off accelerator pedal. Pump brake repeatedly. Shift to low gear if possible. Apply park brake gradually. Rub tire against shoulder of pavement or curb, or hit a fence or small bushes quickly before picking up speed if you are on a mountain road.

3. BLINDING LIGHTS
   Don't fight the other driver with your lights. Don't look at the other lights. Slow down. Look at your edge of the road. Pull over and give the other driver plenty of room.

4. DRIVING ON SNOW AND ICE
   Keep well under dry road speed. Keep car pulling steadily. Make no sudden changes in speed, gear ratio or direction. To slow down, lightly "pump" the brake pedal two or three times.

5. FLOODING OF CARBURETOR
   Press accelerator against floor and hold (do NOT pump accelerator). Turn ignition to "on" position. Engage starter for twenty or thirty seconds until engine starts. Repeat if necessary.

6. GAS PEDAL STICKS
   Turn off ignition. Depress clutch or move selector to "N". Apply brake and pull off the highway.

7. HOOD FLIES UP
   Look ahead out of the left window. Look under the center of the hood. Pull off the road as soon as possible.

8. LIGHTS FAIL
Try other lights - hit turning signal, dimmer switch (high or low beam), parking lights, fog lights, brake lights. If battery or cable failure - steer as best you can and stop quickly.

9. RECOVERING FROM A SKID
Keep yourself under control. Avoid braking. Steer in the direction in which the rear end of the car is skidding. Straighten front wheels when car begins to straighten.

10. RUNNING OFF PAVEMENT
Release accelerator pedal. Keep firm grip on the steering wheel. Resist the urge to return to the pavement immediately. Straddle the pavement edge until the car is under control. Turn sharply back onto the highway after slowing down. It is best to wait for a driveway or an area where the pavement is nearly level.

11. STALLING ON RAILROAD TRACKS
If train is coming, leave the car. Standard transmission - place gear shift lever in low or reverse, engage clutch, press starter. Automatic transmission - get out of the car and obtain assistance to push the car off the tracks.

12. DEEP RUTS AND/OR HOLES IN ROAD
Reduce speed. Try to avoid. Maintain a firm grip on the steering wheel.

13. STEERING FAILURE
Brake down rapidly. Hard steering - pull off the road and check for low tire or broken power steering belt.

14. SUBMERGED CAR
Escape through open window before water reaches the window level. If car sinks too rapidly, move to rear passenger compartment to breathe trapped air while planning escape.

15. TIRE BLOW OUT

Rear tire blowout is considered more dangerous. Avoid braking. Keep firm grip on the steering wheel. Keep wheels as straight as possible. Pump brakes lightly. Get well off the road to change the tire.

16. WHEN AN ACCIDENT IS IMMINENT AND UNAVOIDABLE

Steer until the accident is unavoidable. Turn off ignition to lessen the possibility of fire. Steer to the right, normally, and adjust with the situation. Stay in the car. Cross arms over face and press head and arms against dash or steering wheel. Right front seat passenger - cross arms over face and press head and arms against dash. Rear seat passengers - cross arms over face and press head and arms against the rear of the front seat. Each person in the car should have seat belts securely fastened.

17. WRONG-WAY DRIVERS

What should you do if you meet a wrong-way driver? First, take defensive action. If at all possible, pull onto the shoulder and stop. If there is no shoulder, try to get out of the oncoming driver's path. Do not attempt to outmaneuver him. Once out of the way, try to flash your lights and blow your horn to attempt to make the driver in error aware of what is happening.

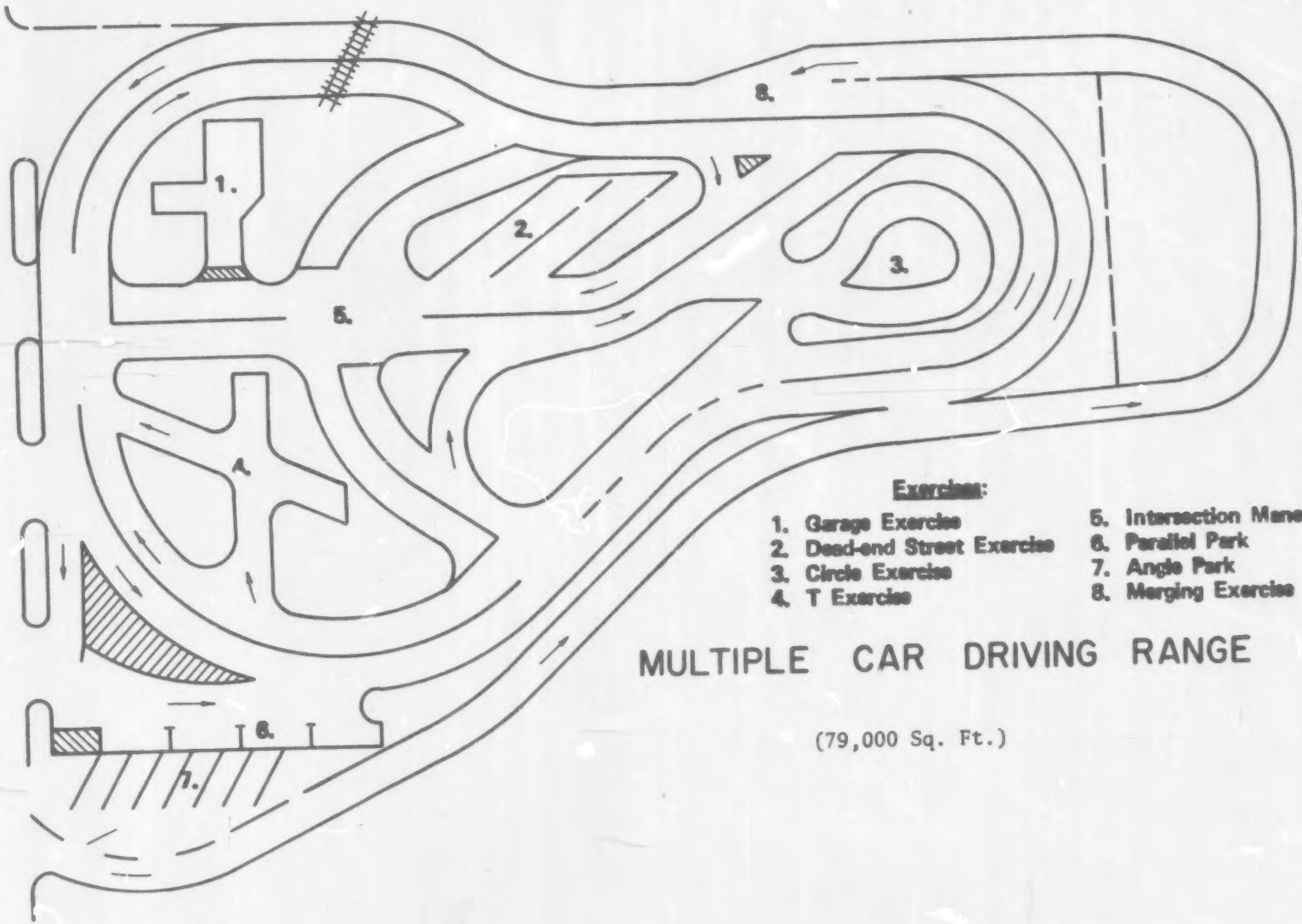
What to do if you should become a wrong-way driver: Don't make a U-turn or try to back up, unless you have plenty of visibility and traffic is clear. Pump your brake until you slow your car, don't go into a skid. Steer to the nearest shoulder and stop, facing traffic. Wait for police to control traffic before you attempt to turn around. Use your emergency flasher to warn oncoming drivers. All passengers, including the driver, should get out of the car.

18. CAR CATCHES ON FIRE

Carry fire extinguisher. Throw mud, dirt, or snow on blaze. Hub cap can be used to carry water from ditch or stream.

19. REAR END COLLISION IMMINENT
Throw yourself across front seat or slump down as your head is supported by back of front seat.

20. BEE IN CAR
Ignore while driving. Stop on shoulder of road and then remove the bee.

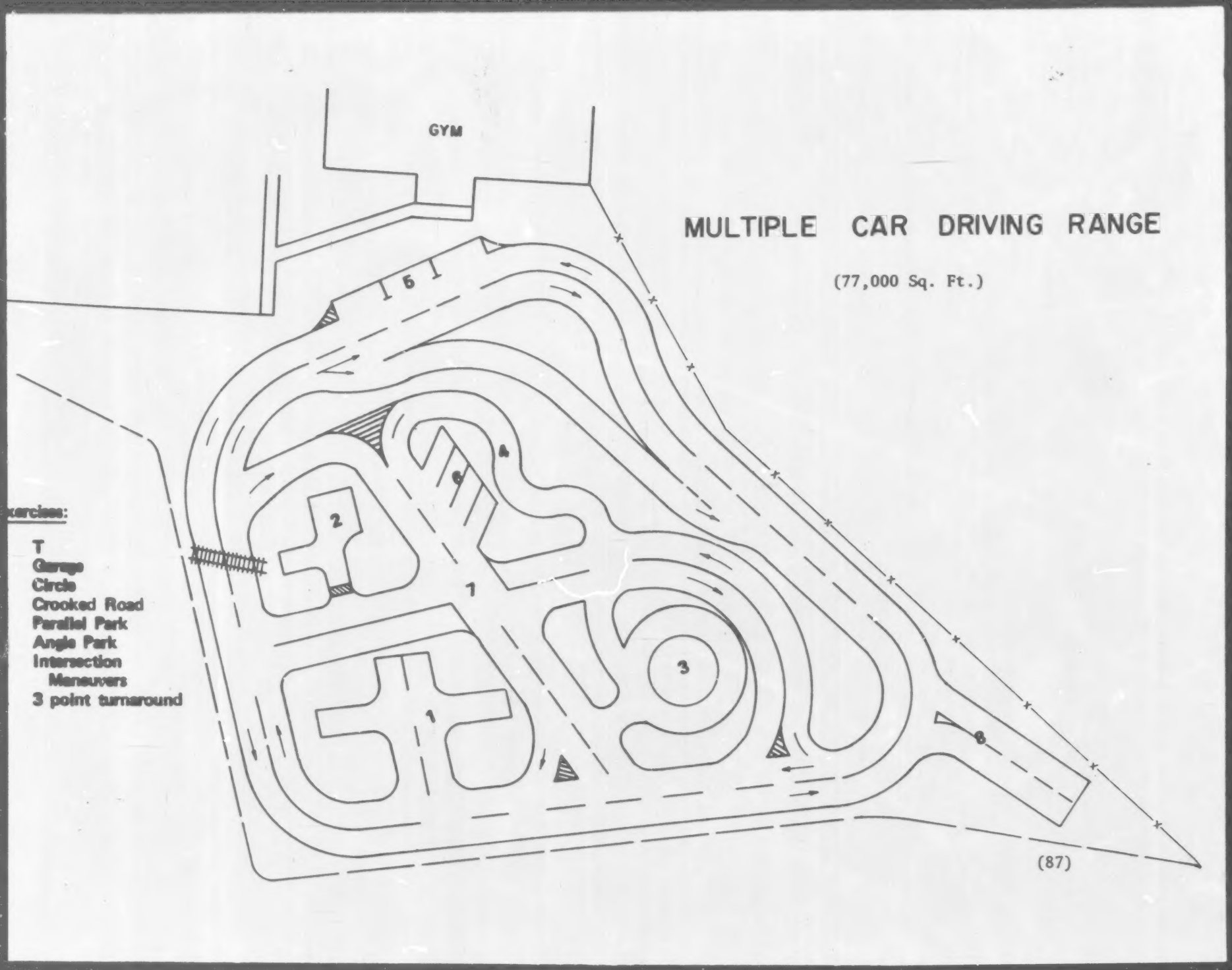


Exercises:

1. Garage Exercise
2. Dead-end Street Exercise
3. Circle Exercise
4. T Exercise
5. Intersection Maneuvers
6. Parallel Park
7. Angle Park
8. Merging Exercise

MULTIPLE CAR DRIVING RANGE

(79,000 Sq. Ft.)


GYM
MULTIPLE CAR DRIVING RANGE
(77,000 Sq. Ft.)
xercises:
T
Garage
Circle
Crooked Road
Parallel Park
Angle Park
Intersection
Maneuvers
3 point turnaround
(87)

SAMPLE SCHEDULES

Teacher	MARCH	3	6	7	8	9	10	13	14	15	16	17	20	21	22	23
1	Simu.	A	C	B	A	C	B	A	C	B	A	C	B	A	C	B
1	Range	B	A	C	B	A	C	B	A	C	B	A	C	B	A	C
3	B.T.W.	C	B	A	C	B	A	C	B	A	C	B	A	C	B	A

Example - Class of 24 students, 5 teachers, 15 day operation, 4 phase program

Each student: 5 hours simulation
5 hours range
2 hours b.t.w.

Teacher	MARCH	3	6	7	8	9	10	13	14	15	16	17	20	21	22	23	24	27	28
1	Simu.	A	A	B	B	A	A	B	B	A	A	B	B	A	A	B	A	B	B
4	B.T.W.	B	B	A	A	B	B	A	A	B	B	A	A	B	B	A	B	A	A

Example: Class of 24 students, 5 teachers, 18 day operation, 3 phase program

Each student: 9 hours simulation
3 hours b.t.w.

STARTING, MOVING, AND STOPPING PROCEDURE

I. Starting Procedure

1. Enter car
2. Lock doors
3. Place key in ignition
4. Adjust seat
5. Adjust mirrors
6. Fasten belts
7. Check parking brake for "ON" position
8. Shift in park
9. Press gas pedal and release
10. Foot cover brake (cover till step 18)
11. Start engine

II. Moving Procedure

12. Shift to proper gear
13. Release parking brake
14. Check traffic forward
15. Check mirrors
16. Signal
17. Check blind spot
18. Foot off brake and accelerate into proper lane
19. Center car in lane

III. Stopping Procedure

1. Check traffic forward
2. Check mirrors
3. Position car in lane
4. Signal
5. Reduction of speed
6. Check blind spot
7. Brake
8. Position car in lane
9. Shift to "N" or "P" gears
10. Parking brake to "ON" position
11. Turn off key - remove it
12. Unfasten seat belt
13. Leave car and LOCK THE DOORS

LANE-CHANGING AND PASSING PROCEDURES

(Basic requirement of lane changing is having at least two lanes going in one direction. Passing is done on a two-way roadway.)

Lane Change

1. Check traffic forward and rear
2. Signal
3. Check blind spot
4. Accelerate
5. Cancel signal

Passing (Two lane changes)

1. Check traffic forward and rear
2. Signal
3. Check blind spot - Warning (lights or horn)
4. Accelerate
5. Change lanes
6. Cancel signal
7. Check mirrors for car just passed
8. Signal
9. Check blind spot
10. Change lanes
11. Cancel signal

OFF-STREET MULTIPLE-CAR DRIVING RANGE DISCIPLINE

1. Students will enter cars only upon signal from the instructor.
2. Always know the number of the car you are driving.
3. The car radio is to be used only for communication from the instructor--do not adjust.
4. No student will start or move the car until directed by the instructor.
5. The speed limit on the range will be a maximum of 15 mph until changed by the instructor.
6. When following another car, remain at least three car lengths behind the car ahead.
7. When driving, do not turn head to look at the teacher or at the radio receiver.
8. Once you have received instructions in an area, you are free to enter that area if it is not occupied.
9. At the close of the period, the driver will park as instructed and leave the key in the left outside door lock.
10. Pay attention to the instructor and do only as you are instructed.
11. Eating or drinking is not allowed in the cars.
12. Keep both hands on the steering wheel, except when signaling or backing.
13. The driver shall always observe the proper pre-ignition and starting procedures on the range.

14. When backing, always follow proper backing procedures--do not look forward until car comes to a complete stop.

15. Be alert: watch the car in front of you; if it stops, you stop. Signal whenever you stop.

16. Directional signals will be used on all turns until directed by the instructor to use manual signals.

17. Be sure to watch your warning lights and temperature gauge.

18. If you become confused, give stop signal, go through stopping and securing procedures, and consult with the instructor.

19. Before leaving car, go through the proper stopping and securing procedures.

20. Student's misconduct will result in immediate expulsion from class.

PROCEDURE FOR BEGINNING DRIVING SKILLS

A. ORIENTATION TO THE CAR AND PRE-DRIVING SKILLS
   1. Check traffic before entering car from left side
   2. Locate controls and safety equipment
   3. Adjust seat - use cushion if necessary
   4. Close and lock door - all doors should be locked
   5. Adjust mirrors - inside and out
   6. Fasten seat belts - passengers too
   7. Adjust ventilation

B. STARTING THE ENGINE
   1. Key in ignition
   2. Parking brake "ON"
   3. Cover foot brake lightly
   4. Shift to "PARK" gear indicator
   5. Turn ignition "ON"
   6. Check gauges
   7. Depress foot brake
   8. Depress accelerator and release (set automatic choke) OR depress accelerator part way and hold if engine is already warm
   9. Turn key to start and release as engine catches
   10. May have to adjust air/heat control after engine has started

C. MOVING FORWARD
   1. Shift to "D" gear while foot brake is still depressed (B-7)
   2. Release parking brake
   3. Place hands on wheel in 10-2 position
   4. Check traffic forward
   5. Check traffic to rear (mirrors)
   6. Give proper turn signal (and hand signal if car is directly behind).
   7. Check "blind spot"
   8. Release foot brake
   9. Accelerate slowly into proper lane, checking once more over shoulder

D. STOPPING ENGINE AND CAR

1. Get into proper lane using correct signals
2. Glance into mirrors
3. Give proper turn signal (and hand signal for stopping)
4. Gradually release accelerator - slow down
5. Brake lightly to stop at curb or side of road
6. Shift to "P" gear
7. Parking brake "ON"
8. Turn ignition to lock and remove key
9. Unfasten seat belt
10. Check oncoming traffic before exiting car

E. BACKING CAR

1. Shift to reverse while foot is still on brake (B-7)
2. Check traffic front, sides, and back (also for obstacles)
3. Assume backing position
4. Release foot brake
5. Accelerate slowly in desired direction, checking "danger points"
6. Brake lightly to a stop
7. Shift to"P" gear and continue (D-7-10) as desired

RANGE EVALUATION SHEET

Grade_____

- 5	Pre-driving procedure (for each violation)	____	____	____	____	____
- 5	Crosses center line	____	____	____	____	____
-20	Speed too fast	____	____	____	____	____
-15	Failure to yield	____	____	____	____	____
- 3	Failure to signal	____	____	____	____	____
-10	Failure to completely stop	____	____	____	____	____
- 3	Hits cone	____	____	____	____	____
- 5	Hits cone representing a car	____	____	____	____	____
- 3	Improper backing position	____	____	____	____	____
- 3	Yellow line violation in exercises	____	____	____	____	____
- 5	Improper lane selection	____	____	____	____	____
- 5	Improper lane change (for each violation)	____	____	____	____	____
- 5	Following too closely	____	____	____	____	____

	Excellent	Good	Fair	Poor
Parallel Parking	_____	_____	_____	_____
Angle Parking	_____	_____	_____	_____

COMMENTS

STATEMENT OF COMPLETION

Dear Parent:

_____ has completed the Driver Education course. While many safe driving skills have been practiced during the course, there has not been time to develop judgment and defensive attitude in traffic situations. You can help to develop these important good driving characteristics and judgments further if you point out, as you ride with him, traffic situations that may lead to trouble unless good judgment and defensive driving techniques are used.

Observation of his driving indicated that additional practice is needed in the following areas:

( ) Knowledge of safe driving practices
( ) Backing the car
( ) Right and left turns
( ) "Hand-over-hand" steering
( ) Heavy-city traffic driving
( ) Angle parking
( ) Speed control
( ) Right-of-way rules
( ) Lane-changing
( ) Overtaking and passing on highway
( ) Parallel parking
( ) Driving attitude

We wish to thank you for your cooperation in helping make this course a success. If you wish to discuss your child, please feel free to contact us.

Sincerely,

_____
Instructor

DRIVER EDUCATION ACCIDENT REPORT

(Use with Events 11 and 12)

Date of Accident_____ Time_____

Accident reported to appropriate police authority (highway patrol, city police, sheriff)

Driver Education vehicle involved_____

Instructor's Name_____

Address and Phone No._____

Driver's Name_____

Address and Phone No._____

Driver's License or Permit No._____

Date of Birth_____ Sex_____

Witness_____

Address and Phone No._____

Witness_____

Address and Phone No._____

Make of Car_____ Year_____ Model_____

Serial Number_____ License No._____

City or Town_____ County_____

Injury: Yes_____ No_____

Detailed Remarks (submit attachment if necessary):

(86)

This is to Certify that

has satisfied the requirements for completion of the

DRIVER EDUCATION COURSE

as prescribed by the Board of Education,

and is, therefore, awarded this **CERTIFICATE.**

this _____ *day of* _____ *19* , *at* _____

High School, _____ *County,* _____
ADDRESS OF SCHOOL

_____
INSTRUCTOR

_____
PRINCIPAL OF SCHOOL

APPENDIX C
Sources Of Equipment

SOURCES OF EQUIPMENT*

Miscellaneous Equipment

Coxco Sound Slide System	Allied Sound Visual Education Company 401 Spence Lane Nashville, Tennessee
Language Master and Cards (adapted for driver education by teacher)	Allied Sound Visual Education Company 401 Spence Lane Nashville, Tennessee
Brake Detonators	American Automobile Association 734 Fifteenth St., N. W. Washington, D. C. 20005
Magnetic Traffic Board	American Automobile Association 734 Fifteenth St., N. W. Washington, D. C. 20005
Sportsmanlike Driving, sixth edition (textbook)	American Automobile Association 734 Fifteenth St., N. W. Washington, D. C. 20005
Driver Evaluator	American Automobile Association 734 Fifteenth St., N. W. Washington, D. C. 20005
Brake Reaction Timer	American Automobile Association 734 Fifteenth St., N. W. Washington, D. C. 20005

Car Models (to illustrate parking, etc.)	American Automobile Association 734 Fifteenth St., N. W. Washington, D. C. 20005
Overhead Projector and Transparencies (teacher made)	3-M Company Film and Allied Products Division 3-M Center St. Paul, Minn. 55101
Dual Brake Control	Associated Engineering Service 23 - 19 122 Street College Point, New York 11356
16mm Projectors (Graflex)	Link Division Singer Education and Training Products 30 Rockefeller Plaza New York, New York 10020
35mm Filmstrip and Slide Projector	Link Division Singer Education and Training products
Mobile Simulator (12 or 16 unit model)	General Precision System, Allstate Link Division Binghampton, New York 13902
Drivocator (Aetna)	Raytheon Learning Systems Company 475 South Dean Street Englewood, New Jersey 07631
Projector Screens and Tables	Any source

*These sources are recommended by existing cooperative driver education programs. This constitutes no endorsement by Appalachia Educational Laboratory.

The equipment listed below is available through The American Automobile Association, 1712 G Street N. W., Washington, D. C.

Steering trainer
Steering model
Cable dual controls
Bar type dual controls
Hydraulic dual controls
Steel stanchions
Roof top sign
"Student Driver" sign
Brake reaction detonators (electrical, three-barrel, and mechanical)
Reaction time tests
Magnetic traffic board
Flannel board
Traffic sign
Parking demonstrator
Dual master cylinder
Cylinder
Clutch and universal
Transmission
Differential
Gearshift
Vision tests
Ignition cut-off switch
Jerk recorder
Hand steadiness test

The following firms also manufacture or distribute equipment for use in driver education classes.

Bausch and Lomb Optical Company
18 So. Michigan Avenue
Chicago, Illinois

Heyimum-Bylt
4945 Edgemere Avenue
Baltimore, Maryland

Porto-Clinic Instruments, Inc.
298 Broadway
New York, New York

Range Equipment

Traffic Cones and Sticks (50 per range)	Bumpa-Tel Box 611 Cape Girardeau, Mo. 63701
Numbered Cartop Signs (8 or 12)	School made
Transmitter (FM or AM model)	High school electronics department
Traffic Signs ("Stop," "Yield," etc.)	School made

APPENDIX D
Sample Post-Event Tests

EVENT 6/Driver Evaluator Testing

I. Depth Perception

Student positions himself 1 1/2 to 2 feet from the edge of a table, eyes level with the top of the table. Using a string attached to front of a toy car, he maneuvers it between two other stationary cars so that front bumpers are approximately equidistant from the edge of the table.

II. Binocular Vision

With one eye closed, student steps forward and touches finger to point of pencil laying extended over the edge of a table.

With one eye closed, student brings tips of index fingers together from distance of one foot.

III. Peripheral Vision

Student stands looking straight ahead with arm raised and outstretched at side. He moves his arm toward the front of his body until his hand comes into view. If the arm passes through 20 degrees or more peripheral vision is poor.

IV. Reaction Time

With chalk draw an accelerator and brake pedal on the floor about one foot apart. Student places his right foot on the accelerator pedal while another person drops a coin from shoulder height. If the student can move his foot from the accelerator to the brake pedal before the coin hits the floor, his reaction time is within 3/4 of a second.

V. Glare Resistance

Student looks through a foot-long tube at a 100 watt light bulb for five seconds in a semi-dark room. Within seven seconds he should be able to read from a printed page.

EVENTS 8 and 9/The Accident Problem

1. Which of the following violations will NOT result in the revocation of one's license?_____
   a. Speeding
   b. Drunkenness
   c. Falsification of records
   d. Recklessness
   e. Leaving the scene of an accident
   f. Stealing a vehicle

2. The point system is best described as_____
   a. A system used to correct bad drivers.
   b. A system to be feared.
   c. A system for keeping a record of licensed driving behavior.
   d. A system to develop awareness of bad driving practices.
   e. A system of little merit.

Explain what procedures you would follow if you were to have an accident in each of the following situations.

3. You own the vehicle and have liability insurance.

4. You own the vehicle but have no liability insurance.

5. You own the vehicle but have no liability insurance and cannot get a "general release."

Answer Key

1. a
2. d

EVENTS 8 and 9/The Accident Problem (con't)

1. A defensive driver is best described as_____
   a. One who minds his own business.
   b. One who shares his experiences.
   c. One who lets other people affect his driving.
   d. One who averts accidents by preventing accident situations.
   e. One who prevents accidents.

From the list below select three characteristics of a defensive driver.

2. _____
3. _____
4. _____

   a. Maintains partial control of his vehicle
   b. Keeps his eyes moving
   c. Is informed of impending danger situations
   d. Is not escape conscious
   e. Is a nonconformist
   f. Is mechanically conscious of his vehicle
   g. Is not emotionally stable

5. If traffic begins to "box" you in, what is the appropriate response?

Answer Key

1. d
2. b
3. c
4. f

EVENT 10/Motorcycle Safety

1. How is a motorcycle defined in state laws?

2. What type of protective gear is required of motorcycle operations? Passengers?

3. What additional, permanently mounted equipment is required on the motorcycle before one is allowed to carry a passenger?

4. Indicate the number of feet required to stop a motorcycle traveling on dry pavement at each of the speeds listed by writing the correct letter in the blank.

4. 20 mph_____
5. 30 mph_____
6. 40 mph_____
7. 50 mph_____

a. 175 feet
b. 90 feet
c. 40 feet
d. 150 feet
e. 75 feet
f. 120 feet

8. If a dog charges a motorcycle, what procedure is generally the best defense?

9. At what angle degree should motorcycles cross railroad tracks and bridge expansion joints?

10. Why is the center strip of each traffic lane dangerous for motorcyclists?

11. Most motorcycle fatalities result from what kind of injury?

Answer Key

4. c
5. e
6. f
7. a

Unit Test: Traffic Laws, Regulations, Driving Speeds, and Restrictions

(Events 11 and 12)

1. The speed limit for driving on an interstate highway is--

   A. 80 mph
   B. 50 mph
   C. 65 mph
   D. 70 mph
   E. 25 mph

2. The speed limit for driving in a residential area is--

   A. 20 mph
   B. 30 mph
   C. 25 mph
   D. 50 mph
   E. 15 mph

3. The speed limit for driving in a school zone is--

   A. 10 mph
   B. 20 mph
   C. 5 mph
   D. 15 mph
   E. 25 mph

4. The legal speed limit for open highway driving is--

   A. 50 mph
   B. 55 mph
   C. 60 mph
   D. 65 mph
   E. 70 mph

5. Outline the correct procedure for overtaking and passing another car.

Outline the correct procedure for making a righthand turn.

Outline the correct procedure for making a lefthand turn.

Identify the hand signals shown in the diagrams by placing the correct letter in each blank.

a.

b.

c.

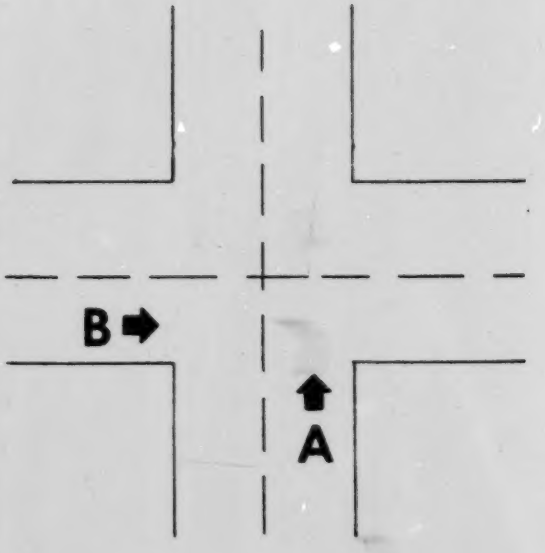
6. _____Stop or slow
7. _____Left turn
8. _____Right turn

9. Which of the following situations do NOT legally require that the driver stop his vehicle?

A. Red flashing light
B. School buses
C. Public conveyances at railroads
D. Emergency vehicles
E. When entering a primary highway from a secondary highway
F. Railroad crossings
G. All of these do require the driver to stop

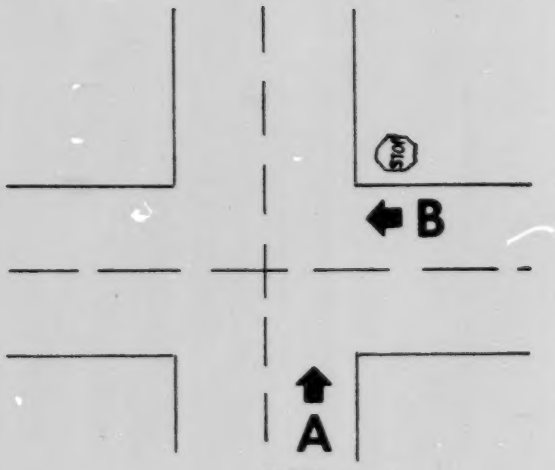
10. Assume that the intersection pictured is a four-way stop. Which driver has the right-of-way?

A. Car A
B. Car B
C. The car reaching the intersection first
D. The car still moving
E. A matter of driver courtesy and is not governed by a set rule

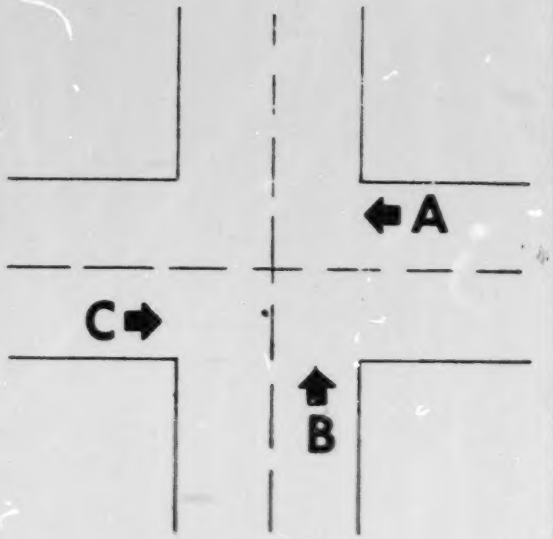


11. In the diagram, which car has the right-of-way?

A. Car A
B. Car B
C. The car on the major highway
D. A matter of courtesy
E. Both cars must stop



12. Assume that the intersection has a flashing red light. Which car has the right-of-way?



A. Car A
B. Car B
C. Car A must stop
D. Car B must stop
E. All cars must stop and then proceed with Cars A and C having right-of-way over Car B.

Seven of the pieces of equipment listed below are legally required on all automobiles. Identify them.

13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____

A. Four fog lights
B. Two headlights
C. Taillights
D. Whistle
E. Horn
F. Brakes
G. License plates
H. Muffler cutouts
I. Safety glass
J. Windshield obstructions
K. Rearview mirrors

Following are five steps which should be followed after an accident. Place them in the correct order.

A. Secure accident report from police
B. Stop and render assistance to injured
C. File report with State Department of Public Safety
D. Notify police
E. Identify yourself to people involved

20. _____

Answer Key

1.	D	8.	C	15.	E
2.	C	9.	G	16.	F
3.	D	10.	A	17.	G
4.	C	11.	A	18.	I
5.		12.	A	19.	K
6.	A	13.	B	20.	B, E, D, A, C
7.	B	14.	C		

From the list, select two reasons for licensing drivers.

1. _____
2. _____

A. To raise revenue from fees
B. To determine driver's ability
C. To keep a record of all drivers living in a state
D. To protect the life and property of citizens
E. To determine whether the driver can read

Place a, b, or c in front of each.

A. Those who may not drive in the state.
B. Those who may drive without a license.
C. Those who may drive when properly licensed.

3. _____ Those under the age of 16.
4. _____ A person with only one eye.
5. _____ Persons driving motor vehicles.
6. _____ An insane person
7. _____ Persons driving farm equipment.
8. _____ A drug addict.
9. _____ An out-of-state resident.
10. _____ Draft dodgers.

Choose three reasons which explain why drivers are tested.

11. _____
12. _____
13. _____

A. To determine ability to read and use road signs
B. To develop state awareness
C. To determine physical and mental limitations
D. To determine driver's knowledge of highway safety
E. To determine state progress and highway development

14. _____
15. _____
16. _____
17. _____

A. Road tests
B. Balloon tests
C. Physical tests
D. Driving demonstration
E. Road sign test
F. Reaction time test
G. Rules test

Which six of the following do NOT relate to the road test?

18. _____
19. _____
20. _____
21. _____
22. _____
23. _____

A. Smooth stops
B. Right-of-way
C. Hazardous conditions
D. Signals
E. Parallel parking
F. Stopping and starting
G. Pedestrians
H. Lane
I. Angle parking
J. Lane changes
K. Backing
L. Checking oil
M. Entering a car
N. All of these

Describe briefly the procedure for renewing a driver's license.

24.

Answer Key

1. b	9. c	17. a
2. d	10. c	18. c
3. a	11. a	19. g
4. c	12. c	20. h
5. b	13. d	21. i
6. a	14. c	22. l
7. b	15. e	23. m
8. a	16. g	24.

Identify each of the signs pictured by writing the letter in the appropriate blank.

1. _____Yield
2. _____Stop
3. _____Speed Limit
4. _____Merging Traffic
5. _____Railroad Crossing
6. _____Crossroad
7. _____Curve
8. _____Interstate Route Marker
9. _____U.S. Route Marker
10. _____State Route Marker

a.

b.

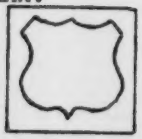
c.

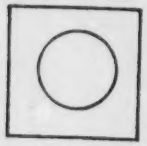
d.

e.

f.

g.

h. 

i. 

j.

Answer Key

1. b
2. f
3. g
4. j
5. d
6. c
7. e
8. a
9. h
10. i

Safe Driving Tips

For each of the driving speeds indicated, identify the corresponding stopping distance on dry pavement.

1. 20 mph _____	a. 264 feet
2. 30 mph _____	b. 186 feet
3. 40 mph _____	c. 128 feet
4. 50 mph _____	d. 347 feet
5. 60 mph _____	e. 43 feet
6. 70 mph _____	f. 80 feet

Select the statement which best expresses the legal responsibility of the driver to the pedestrian.

7. _____

A. Driver must stop for pedestrians.
B. Driver must stop for pedestrians at crosswalks.
C. Pedestrian crossing is independent of driver.
D. Driver is not responsible for pedestrian action.
E. Driver should follow pedestrians walking along the road.

Select the correct sequence of actions for parallel parking and write the letters in order in the blank.

8. _____

A. Turn wheel sharp right and pull toward curb.
B. Turn wheel sharp right and back slowly.
C. When clear of car ahead, turn wheels sharp left and back slowly to car behind.
D. Stop even with car ahead but about 1 1/2 feet away from it.

To park down hill with a curb the front wheels should be--

9. _____

a. Turned outward
b. Left in center steer
c. Turned inward
d. Should not be considered

10. _____

a. Turned outward
b. Left in center steer
c. Turned inward
d. Should not be considered

Identify the three areas in which a car may be legally parked.

11. _____
12. _____
13. _____

a. In front of garages
b. Within 15 feet of driveways
c. Any area that does not have a no parking sign
d. In tunnels
e. Parking lots
f. Bridges
g. Within 15 feet of fire hydrants
h. Within an intersection

EVENT 13/Nature's Traffic Laws (con't)

Answer Key

1. e
2. f
3. c
4. b
5. a
6. d
7. b
8. D, B, C, A
9. c
10. a
11. b
12. e
13. g

EVENT 22/Freeway and Interstate Driving

1. On the blank write in the correct sequence the letters corresponding to the actions involved in entering an interstate highway.

_____

a. Merge into main traffic lane
b. Obey posted ramp speed
c. Signal intention to merge into main traffic lane
d. Yield to approaching traffic
e. Turn signal off
f. Accelerate to cruising speed

2. On the blank write in the correct sequence the letters corresponding to the actions involved in leaving an interstate highway.

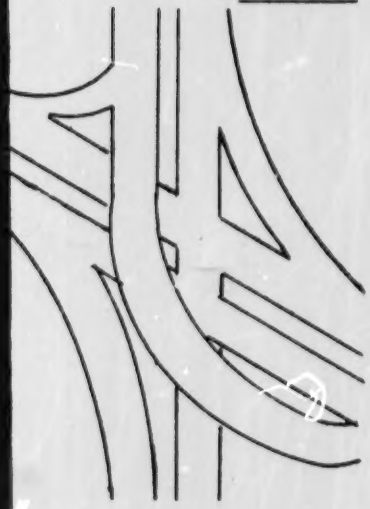
_____

a. Signal intention
b. Move to deceleration lane
c. Check rear view mirror
d. Turn signal off
e. Reduce speed

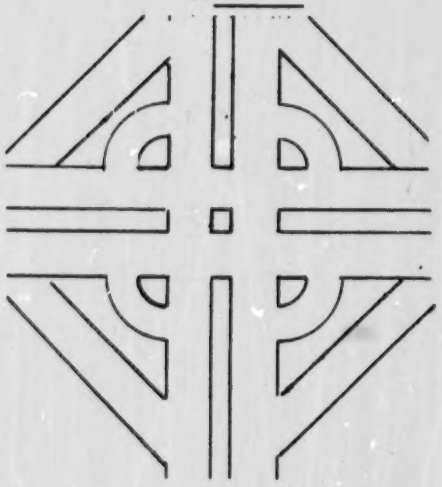
Identify the type interchange illustrated by writing the letter in the blank.

a. Directional
b. Trumpet
c. Diamond
d. Cloverlead
e. Multilateral
f. Oval
g. Bidirectional

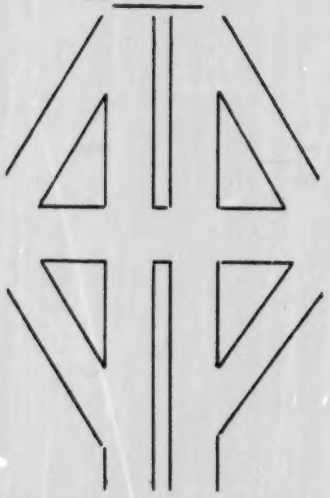
3._____



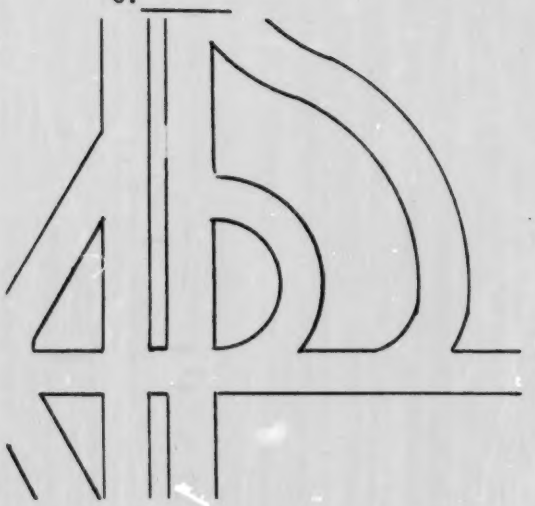
4._____



5._____



6._____



Answers:
1. b, c, f, d, a, e
2. c, a, b, e, d
3. a
4. d
5. c
6. b

EVENT 24/Car Maintenance

1. Discuss the operation of an internal combustion engine explaining the four-stroke cycle principle.

2. What does a spark plug do?

3. What does a carburetor do?

4. Describe how the engine produces power from the time of fueling until the wheels turn.

5. List the advantages and disadvantages of automatic transmissions.

6. List three functions performed by oil in a car's engine.

7. Name the parts of the power train and briefly describe the function of each.

8. How is an automobile engine cooled?

9. What relationship does the operation of a hydraulic brake system have to the amount of fluid in the master brake cylinder?

10. What is the work of the distributor? Why is its timing so important?

Sample Road Test Score Sheet

Student's name _____ Date _____

Score 1 point for each correct response.

I. Driver
- Checks doors
- Adjusts seat
- Buckles seat belt
- Adjusts mirror

II. Starting Engine
- Checks gearshift or selector
- Brakes when using selector

III. Moving
- Looks in all directions
- Smooth start
- Places hands in stable position
- Does not drive too fast for conditions
- Does not drive too slowly for conditions
- Does not straddle lanes
- Does not follow too closely

IV. Stopping
- Comes to a full stop
- Smooth stop
- Does not hesitate too long at stop

V. Parallel Parking
- Gives proper signal
- Stops in proper position
- Backs less than three times
- Does not strike curb
- Does not hit stanchions
- Does not stall engine
- Parks within six inches of curb

VI. Upgrade and Downgrade
- Proper wheel position
- Secures all brakes

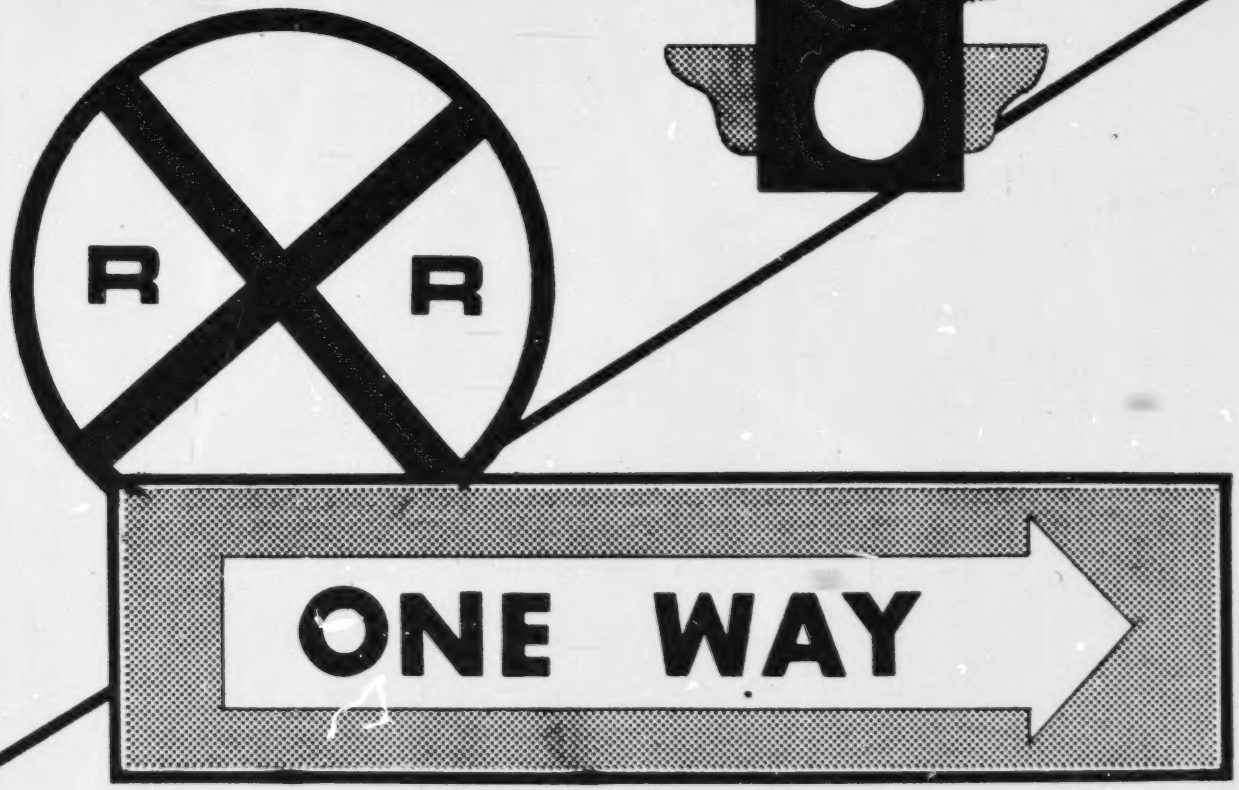
VII. Signaling
- Turning--gives proper signal
- Leaving curb--gives proper signal
- Does not go through yellow light
- Does not go through red light
- Uses hand signals

Possible score: 30

Ratings:

30-29 points	Very Good
28-24	Good
23-19	Average
18-16	Poor

Note: Time is allowed in the instructional schedule for a written final examination. The items for such an examination can be taken from tests contained in this manual and those available with the Drivocator and simulator equipment.



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APPENDIX E
Supplementary Materials

Supplementary Materials

While the supplementary materials and equipment listed in this Appendix are not required for the Cooperative Driver Education Program, instructors may wish to supplement their materials with others from the list.

Books

Automobile Safety Foundation. The Multiple Car Method. Washington: The Foundation, 1967.

Behme, Bob. 1970 Motorcycle and Trail Biking Handbook. New York: Pyramid, 1970.

Bradley, James J. Your Future in Automotive Service. New York: Arco, 1970.

Cohen, John and Barbara Preston. Causes and Prevention of Road Accidents. New York: Hillary House, 1969.

Fales, E. D. Book of Expert Driving. New York: Hawthorn Books, 1970.

Felsen, Henry G. To My Son, the Teen-Age Driver. New York: Dodd, Mead, 1964.

Gault, William C. Dirt Track Summer. New York: Starline, Scholastic Book Services, 1970.

Glenn, Harold T. Automechanics. Peoria, Illinois: Bennett, 1969.

Griffen, Garnet. Teenager and Safe Driving. New York: Rosen, 1967.

Hoffman, Robert N. Murder on the Highway: Its Causes and Cures. New York: Barnes, 1966.

Hyde, Margaret O. Driving Today and Tomorrow. (revised edition) New York: McGraw-Hill, 1965.

Johnson, Larry and Bill Toboldt. Automotive Encyclopedia. Revised edition. South Holland, Illinois: Goodheart-Wilcox, 1970.

Kearney, Paul W. How to Drive Better and Avoid Accidents. Third edition. New York: Crowell-Collier, 1969.

National Commission on Safety Education. Policies and Practices for Driver and Traffic Safety Education. Washington: National Education Association, 1964.

Purdy, Ken W. Young People and Driving. New York: John Day, 1967.

Radlauer, Edward. Motorcycles, Whirling Wire Wheels. New York: Abelard-Schuman, 1969.

Schlesinger, Lawrence E. Is There a Teenage Driver in Your House? New York: Signet Books, World Publishing Company, 1967.

Sports Illustrated. Sports Illustrated Book of Safe Driving. Philadelphia: Lippincott, 1962.

Weiers, Ronald M. Licensed to Kill: the Incompetent American Motorist and How He Got That Way. Philadelphia: Chilton, 1968.

Periodicals

Car and Driver. New York (Ziff-Davis) Monthly
Car Life. Newport Beach, Calif. (Bond) Monthly
Hot Rod Magazine. Los Angeles (Peterson) Monthly
Motor Age. Philadelphia (Chilton) Monthly
Driver Letter. Chicago (National Safety Council) Monthly

Textbooks

Aaron, James E. and M. K. Strasser. Driver and Traffic Safety Education. New York: Macmillan, 1966.

American Automobile Association. Sportsmanlike Driving. Sixth edition. New York: McGraw-Hill, 1970. (Filmstrips and loops supplement text).

Bonner, James S. Basic Driver Education. Danville, Illinois: Interstate, 1966.

Certner, Simon. Driver Education and Traffic Safety. Englewood Cliffs, New Jersey: Prentice-Hall, 1967.

Glenn, Harold T. Youth at the Wheel. Peoria, Illinois: Bennett, 1965.

Halsey, Maxwell and Richard Kaywood. Let's Drive Right. Fourth edition. Glenview, Illinois: Scott, Foresman, 1968.

Hoffman, Robert N. Driver Education. Cranbury, New Jersey: Barnes, 1968.

Lauer, A. R. Tomorrow's Drivers. Chicago: Lyons and Carnahan, 1967.

New York University, Center for Safety Education. Driver Education and Traffic Safety. Englewood Cliffs, New Jersey: Prentice-Hall, 1967.

White, Ernest B. and M. P. Bingham. Road to Better Driving. Revised edition. Bronxville, New York: Cambridge Books, 1965.

Tests

Civil Service Examination Passbook: Motor Vehicle Operator

Available from: National Learning Corporation
132 Livingston Street
New York, New York 11201

National Test in Driver Education

Available from: Center for Safety Education
New York University
Washington Square
New York, New York 10001

Siebrecht Attitude Scale

Available from: Center for Safety Education
New York University
Washington Square
New York, New York 10001

Gates Scale of Emotional Maturity (Doctoral dissertation, 1954)

Available from: William B. Gates
University of Houston
Houston, Texas 77002

Sources of Free and Inexpensive Films, Filmstrips, etc.

Aetna Life and Casualty
151 Farmington Avenue
Hartford, Conn. 06115

Allstate Insurance Company
Driver Education Section
Allstate Plaza
Northbrook, Illinois 60062

AAA Foundation for Traffic Safety
734 15th Street N.W.
Washington, D. C. 20005
(Materials may be available
through local AAA branches)

American Automobile Assn.
Traffic Engineering and
Safety Department
1712 G Street N.W.
Washington, D. C. 20006

American Medical Assn.
535 N. Dearborn Street
Chicago, Illinois

Ford Motor Company
Traffic Safety and
Highway Improvement Dept.
American Road
Dearborn, Michigan 48120

American Optometric Assn.
Division of Public Information
7000 Chippewa Street
St. Louis, Missouri 63119

Association Films, Inc.
227 Faulkner Road, N.W.
Atlanta, Georgia 30324

N. W. Ayer and Son, Inc.
1345 Avenue of the Americas
New York, New York 10019

Bell Telephone System
(See nearest Bell System
business office).

Champion Spark Plug Company
Film Department
900 Upton Avenue
Toledo, Ohio 43601

National Safety Council
425 Michigan Avenue No.
Chicago, Illinois 60611

Nationwide Mutual Ins. Co.
246 No. High Street
Columbus, Ohio 43215

General Motors Corp.
General Motors Bldg.
3044 W. Grand Blvd.
Detroit, Michigan 48202

Hanover Insurance Group
10 Post Office Square
Boston, Mass. 02109

Interstate Commerce Comm.
Bureau of Motor Carriers
Washington, D. C. 20423

Jam Handy Organization
Film Distribution Dept.
2821 E. Grand Blvd.
Detroit, Mich. 48211

Kemper Insurance
4750 Sheridan Road
Chicago, Illinois 60640

Liberty Mutual Ins. Co.
175 Berkeley Street
Boston, Mass. 02117

Marathon Oil Company
Film Library
539 So. Main Street
Findlay, Ohio 45840

Royal-Globe Insurance Co.
150 William Street
New York, N. Y. 10038

Sentry Insurance
200 Strongs Ave.
Stevens Point, Wisc. 54482

Stonewall Insurance Co.
1804 Seventh Ave., No.
Birmingham, Ala. 35203

Travelers Insurance Company
700 Main Street.
Hartford, Conn. 06108

U. S. Air Force
USAF Central Audio-Visual
AF Audio Visual Center
Norton AFB, Calif. 92409

U.S. Fidelity & Guaranty Co.
Calvert and Redwood Streets
Baltimore, Maryland 21202

Utica Mutual Insurance Co.
P. O. Box 530
Utica, New York 13503

Maryland American General Group
701 40th Street
P. O. Box 1228
Baltimore, Maryland 21211

Metropolitan Life Ins. Co.
1 Madison Avenue
New York, N. Y. 10010

Modern Talking Picture Service
1212 Avenue of the Americas
New York, N. Y. 10036

APPENDIX F
Typical Behind-The-Wheel Lesson Plans

Behind-The-Wheel Instruction

Event 1

Objectives:

1. To develop proficiency in adapting skills to a variety of traffic and road situations.

   Upon completing the unit, the learner will demonstrate correct procedures for entering the car, starting the motor, shifting, steering, creeping, stopping, driving in reverse, and signaling.

Course Content:

1. Entering the car
2. Starting
3. Shifting
4. Steering
5. Creeping
6. Stopping
7. Driving in reverse
8. Signaling--
   a. Manually
   b. Mechanically

Materials:

Dual control automobile; individual record of behind-the-wheel instruction.

Suggested Activities:

1. This unit allows each student 1/2 hour behind-the-wheel driving experience and 3 hours observing other students driving.

NOTE: The number of sessions required to complete this unit varies depending on class enrollment.

Behind-The-Wheel Instruction

Event 2

Objectives:

1. To develop proficiency in adapting skills to a variety of traffic and road situations.

   Upon completing the unit, the learner will demonstrate correct procedures for judging rights-of-way, turning at intersections, turning vehicle around, residential driving, and city driving.

Course Content:

1. Vehicle right-of-way at intersections
2. Pedestrian right-of-way
3. Turning at intersections--right, left, with stop sign, with traffic signals
4. Turning vehicle around--Y turn, U turn
5. Residential driving
6. City driving

Materials:

Dual control automobile

Suggested Activities:

1. This unit allows each student 1 hour behind-the-wheel driving experience and 3 hours observing other students driving.

NOTE: The number of sessions required to complete this unit varies depending on class enrollment.

Behind-The-Wheel Instruction

Event 3

Objectives:

1. To develop proficiency in adapting skills to a variety of traffic and road situations.

   Upon completing the unit the learner will demonstrate correct procedures for parking, driving on grades, and driving on highways and expressways.

Course Content:

1. Parking--Angle and Parallel
2. Driving on grades--ascending, descending, stopping, starting
3. Highway driving
4. Expressway driving

Materials:

Dual control automobile

Suggested Activities:

1. This unit allows each student 1 hour behind-the-wheel driving experience and 3 hours observing other students driving.

NOTE: The number of sessions required to complete this unit varies depending on the class enrollment.

Behind-The-Wheel Instruction

Road Test

Objectives:

1. To evaluate students' ability to operate a motor vehicle safely and efficiently in a variety of traffic settings.

   The individual should score at least 19 on the road test.

Course Content:

1. Road test

Materials:

Dual control automobile; road test check sheet (see next page).

Suggested Activities:

1. Behind-the-wheel training culminates with a comprehensive half-hour road test for each student.

NOTE: The number of sessions required to complete this unit varies depending on the class enrollment.

This multi-student, multi-media teaching device, the Drivocator, utilizes movie and filmstrip projectors to flash questions on the screen. Students register their answers on desk responder units. The teacher's console records answers on magnetic tape and gives instantaneous scoring on each student.

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